A CATALOGUE OF THE IRISH CHALCIDOIDEA (HYMENOPTERA)

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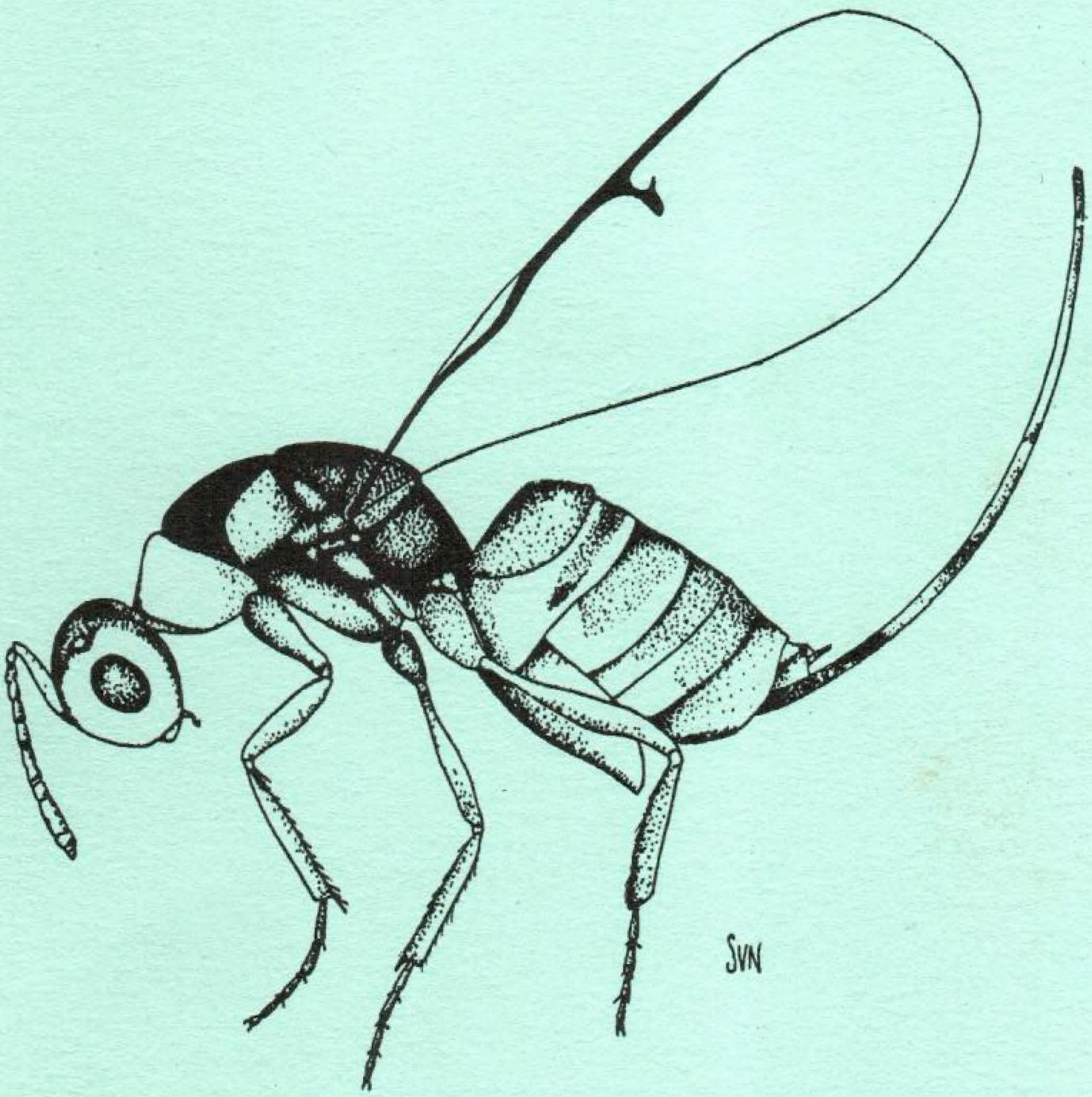
J. P. O'Connor, R. Nash and Z. Bouček



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Front cover: a female of *Megastigmus pictus* (Förster) (the hind-wing is not shown). The species is only known from two Irish females. Illustration by Sarah Nash.

DEDICATED TO FRANCIS WALKER (1809-1874) AND MARCUS W. R. DE VERE GRAHAM (1915-1995) IN RECOGNITION OF THEIR IMPORTANT CONTRIBUTIONS TO OUR KNOWLEDGE OF THE IRISH CHALCID FAUNA.

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Preface

This volume is a companion one to that published on the Braconidae (*Occasional Publication* **Number 4**). It is another contribution towards a checklist of the Irish Hymenoptera. The catalogue is a striking example of close co-operation between three major institutions based in Great Britain, Northern Ireland and the Republic of Ireland. The publication is unique in that it is the first attempt to list the chalcid species of Ireland - a group of major importance in biodiversity. The Society hopes that it will stimulate further work on these lovely insects.

The Irish Biogeographical Society wishes to thank Dr Pat Wallace, Director of the National Museum of Ireland, for his interest and encouragement; Ms Sarah Nash for her beautiful figure of *Megastigmus pictus*; the National Museum of Ireland for its sponsorship; the Natural History Museum (London) and the Ashmolean Museum (Oxford) for permission to reproduce figures/photographs. Both institutions kindly waived charges for reproduction. In particular, the Society is indebted to Mr J. M. C. Holmes for converting the typed text into camera-ready copy.

As a result of the kindness of the above, the Society is delighted that it will be possible to send *Occasional Publication* **Number 6**, free of charge, to all members who have paid their subscriptions for the year 2001.

J. P. O'Connor
General Editor,
Irish Biogeographical Society
15 November 2000.

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A CATALOGUE OF THE IRISH CHALCIDOIDEA (HYMENOPTERA)

by

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Abstract

The Irish chalcidoid fauna is reviewed and a checklist provided. Data are given for 457 species, 59 of which are recorded from Ireland for the first time. The family Ormyridae is also added to the Irish fauna.

Introduction

The superfamily Chalcidoidea includes some 21,000 species world-wide, most of which are less than 3mm in length. Indeed, they average 1.5mm but the smallest is about 0.11mm. Many have strongly sculptured bodies with metallic blue, green, bronze or purple reflections. Although a very neglected group, as much as 10% of all insect species may belong to the Chalcidoidea. They have an extremely wide host range, attacking both plants and arthropods. Very many species are phytophagous and a small number are serious pests. However, most are parasitoids and some species have been successful in biological control programmes. There are solitary and gregarious species; ectoparasitoids and endoparasitoids; primary, secondary and tertiary parasitoids; polyembryonic species; and species with planidial larvae. All stages of hosts are attacked, ranging from the egg to the pupa (Gauld and Bolton, 1988; Noyes, 1998).

The literature on the Irish Chalcidoidea is scattered and no checklist has ever been compiled. As a result, it has been very difficult for anyone to commence studying the various families which make up the superfamily. The present catalogue is designed to eliminate these problems. It is a companion volume to that already published on the Braconidae (O'Connor, Nash and Achterberg, 1998) and a contribution towards a checklist of the Irish Hymenoptera which is in

preparation. In this context, the authors would be delighted to hear of any errors or omissions. The detailed information in the catalogue concerning sites etc. will facilitate the conservation of rare and threatened chalcidoids.

Historical account

There have been few workers on the Irish chalcids despite their beauty and economic importance ("green myriads in the peopled grass" - Francis Walker). Indeed, they have been greatly neglected by Irish entomologists. Only one, A. H. Haliday (1806-1870) (Plate 1), has made a major contribution to their study for he described several genera and species (Haliday, 1833, 1844). However, his friendship with the Englishman Francis Walker (1809-1874) (Fig. 1, Plate 2) was more significant. Haliday was a superb collector and he sent rare and unusual specimens to the latter for study. Many were subsequently described by Walker as species new to science. Haliday also provided manuscript descriptions and even illustrations. These contributions often went unmentioned by Walker. From 1841 to 1842, 15 plates drawn by Haliday, illustrating the genera of Chalcidoidea, appeared in volume one of *The Entomologist* (Graham, 1987b). These are reproduced in Appendix 1. In addition, Haliday presented a number of types to Walker who placed them in the British Museum. Walker was not always punctilious in acknowledging this. For instance, in his *Lists of the Hymenopterous Insects in the British Museum* (Parts 1 and 2 (1846a, 1848)), he records several species as 'England'; From Mr Walker's collection', although these species had been originally recorded from Ireland and taken by Haliday. This is confirmed by the only specimens representing them in the Natural History Museum, London; these being recognizable as Haliday specimens and usually indicated as Irish by a distinctive label (Graham, 1961a). Nevertheless, Walker's work forms a major part of what we know about the Irish chalcids. Further information on Haliday and his collection will be found in O'Connor and Nash (1982) and O'Connor, Nash and Achterberg (1999).

We owe most of our knowledge of the Irish Chalcidoidea to Marcus W. R. de Vere Graham (1915-1995) (Plates 3 and 4). Born in Co. Durham, his parents came from Donegal and Windermere. After the Second World War, he studied Natural Science in Trinity College, Dublin. While in Dublin, he worked on the Braconidae with A. W. Stelfox of the National

Museum of Ireland. On the latter's advice, he turned his interest to the Chalcidoidea and subsequently became a world authority on the group. Graham became Curator in the Hope Department of Oxford University. He visited Ireland many times, studying the Haliday Collection in the National Museum of Ireland and also collecting chalcids especially at some of Haliday's sites. Further information concerning Graham will be found in Bouček and Noyes (1997) and O'Connor (2000a).

Marcus Graham made his contribution in two ways. Firstly, he sorted out the proper names which should be applied to taxa recorded or described from Ireland by Walker. Although, the latter was one of the most widely-known entomologists of his day, his powers as a describer were so poor that his reputation has suffered badly. As time went on his work deteriorated into a mechanical process which made his descriptions almost valueless. However, his work on the Chalcidoidea is important to-day because he amassed such a comprehensive collection at such an early date (Graham, 1979). Walker described over two thousand species from Britain, Ireland and various parts of western and southern Europe, mostly unrecognizable from descriptions. Graham clarified most of these names and was able to include them in his keys for identification of valid species (Bouček and Noyes, 1997). As a result, it is possible to recognize the majority of the species reported from Ireland by Walker. Secondly, Graham also collected specimens from sites throughout Ireland and he recorded many species new to the island. In addition, many of his descriptions of new species are based partly on Irish material. Indeed a small number of his species are known only from Irish specimens. Without his research, this catalogue would not have been possible. Other workers on the Irish Chalcidoidea are cited in the references.

FIGURE 1: Francis Walker (by A. G. Butler, 1890).

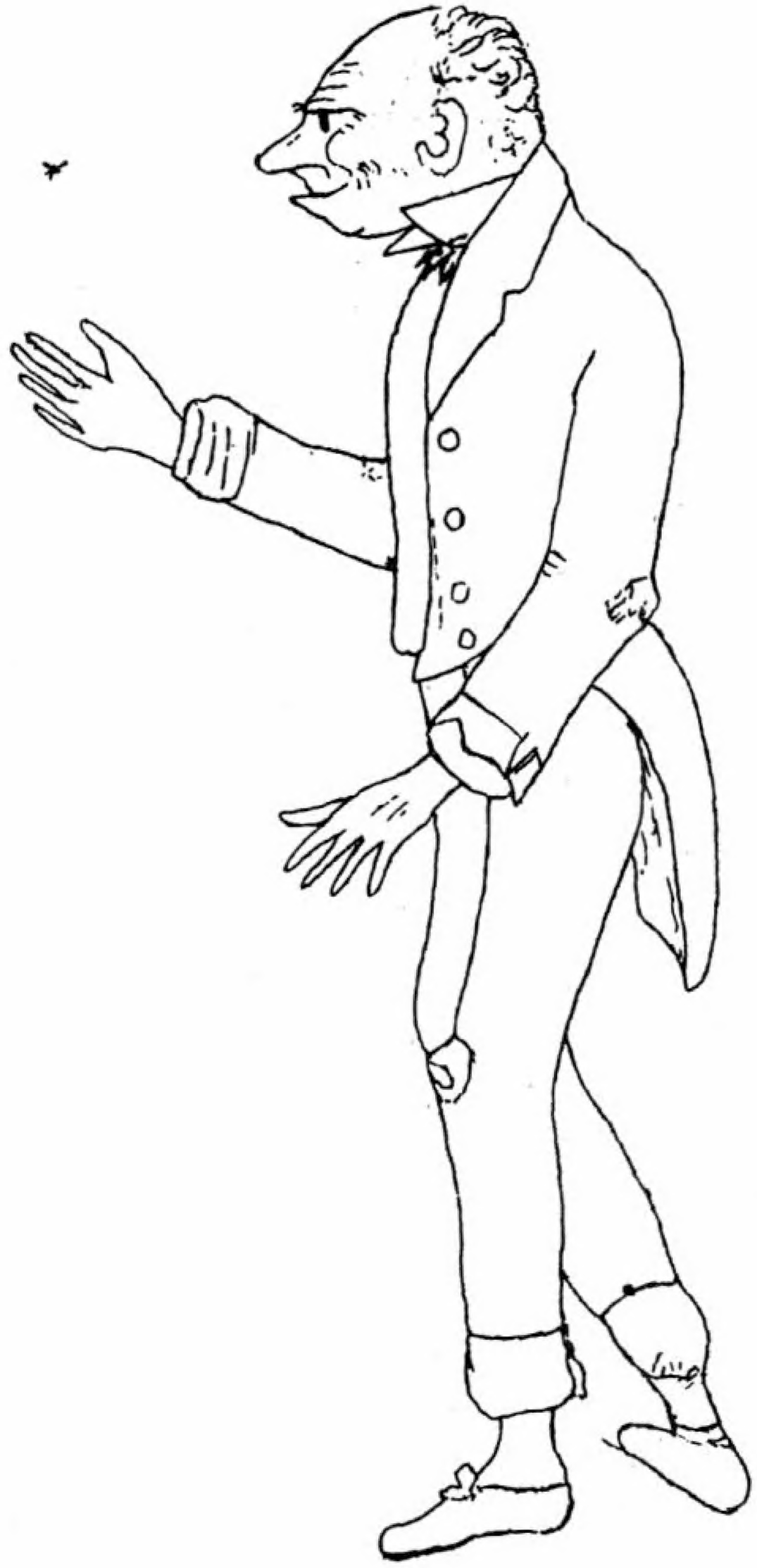


PLATE 1. Alexander Henry Haliday.

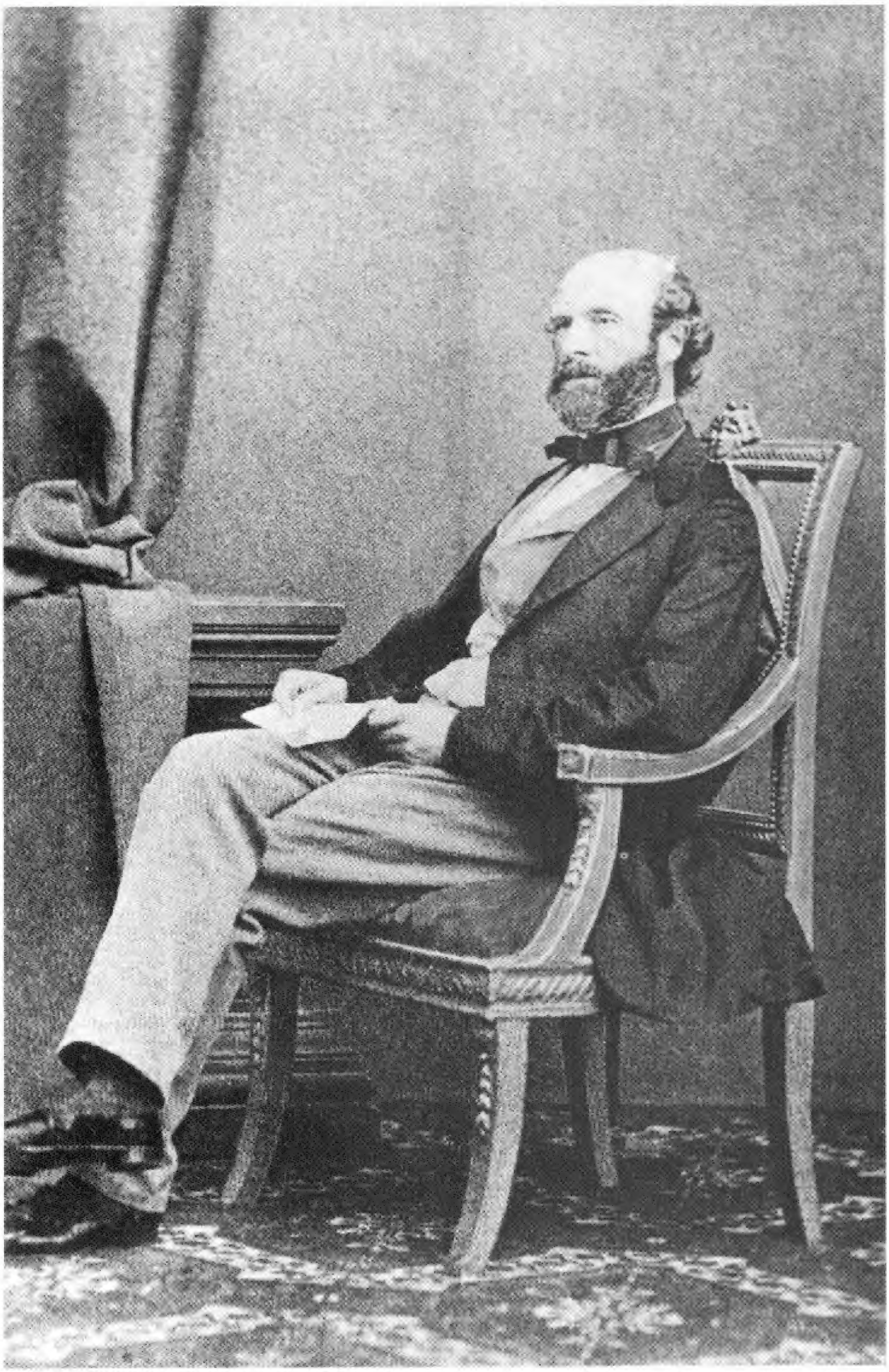
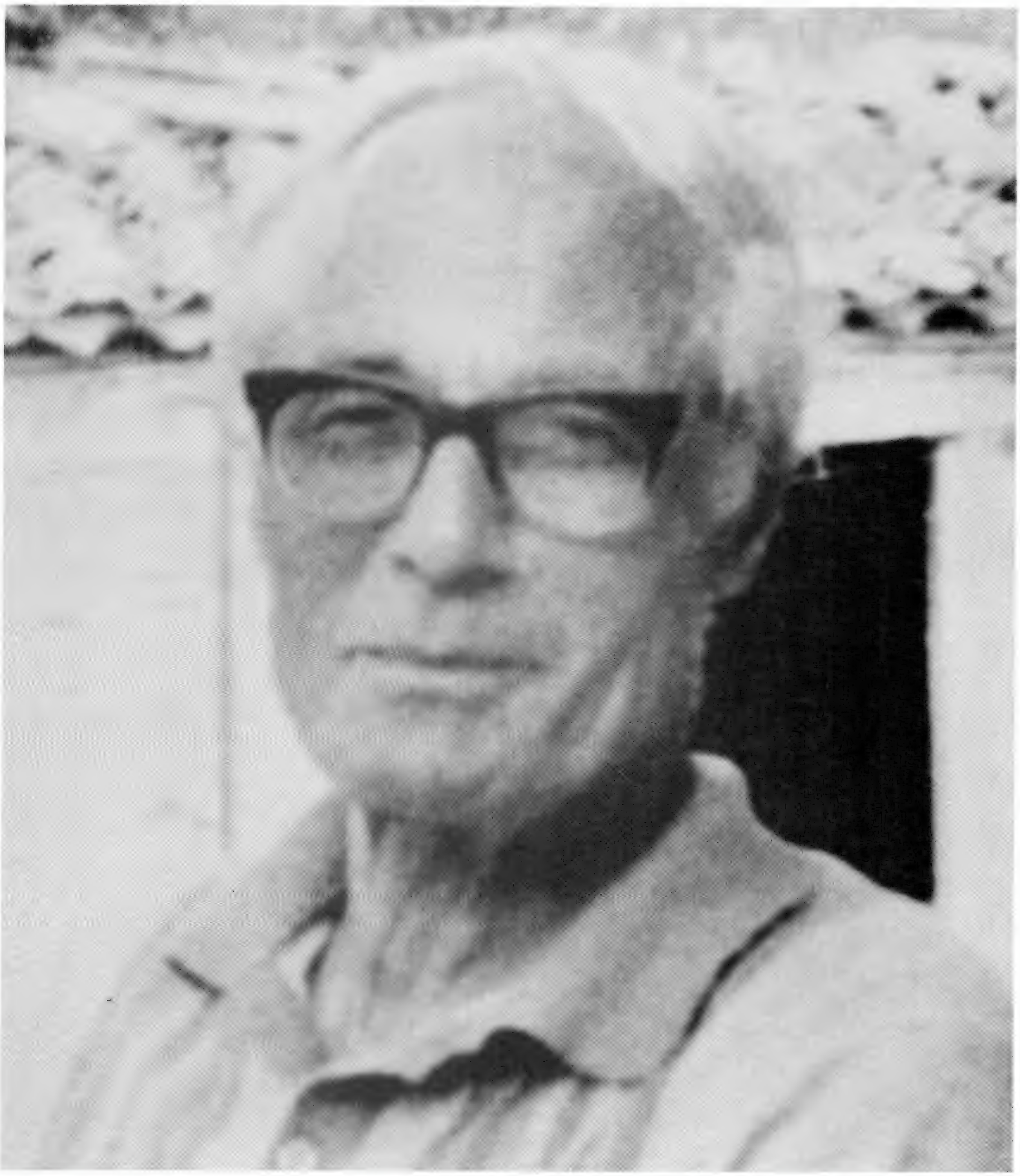


PLATE 2. Francis Walker (Courtesy of Ashmolean Museum, Oxford).

PLATE 3. Marcus de Vere Graham (1950 and ?1958).

PLATE 4. Marcus de Vere Graham (1994).



The present catalogue

Based mainly on the published literature, full data are given where available including distributions, flight-periods and hosts. In some instances, it has been possible to give unpublished information gleaned from museum material when it was unavailable in the literature. Happily, many of Haliday's specimens have survived in the National Museum of Ireland and some of these are recorded here for the first time. This material was sorted and re-identified by Graham. In addition, where possible, Irish records in the Graham Collection in the Natural History Museum (London) have been included. Dr R. R. Askew has kindly provided details of Irish material in his collection. Nomenclature follows Bouček and Rasplus (1991), Noyes (1998), Graham and Gijswijt (1998), and Baur and Bouček (2000). A total of 457 species are reported from Ireland, including 59 new to the fauna. This represents a little over 30% of the number known from Britain (*circa* 1465) and undoubtedly numerous chalcids await discovery in Ireland. This percentage is much lower than that of the Braconidae (44%) (O'Connor, Nash and Achterberg, 1999).

Checklists are provided for the twelve families known from Ireland and a very short description of each is given under the appropriate heading in the catalogue. However, for further information, including taxonomic characters, keys and other literature, hosts and life histories, the reader should consult Gauld and Bolton (1988) and Goulet and Huber (1993). Whenever possible, grid references for localities mentioned in the text are given in Table 1. For some of the older records, these only indicate the general area of capture rather than the precise site. From the maps available to the authors, it was impossible to provide more definite information without visiting the relevant areas. If authors have used vice-counties, these are cited.

Abbreviations used in the text

AHH - A. H. Haliday; AWS - A. W. Stelfox; BH - B. Healy; BMNH - British Museum (Natural History); BPB - B. P. Beirne; EOM - E. O'Mahony; GCDG - G. C. D. Griffiths; MWRG - M. W. R. de V. Graham; JMOC - J. P. and M. A. O'Connor; JNH - J. N. Halbert; JPOC - J. P. O'Connor; NMI - National Museum of Ireland; OUM - Oxford University Museum; RCF - R. C. Faris; RN - R. Nash; RRA - R. R. Askew; SW - S. Wistow; UM - Ulster Museum; WDH - W. D. Hincks. Nees von Esenbeck (also known as Nees ab Esenbeck) is given as Nees.

TABLE 1. List of collecting sites.

The authors could not find one of the localities on the Irish Ordnance Survey maps and are unable therefore to provide a grid reference for the site which is shown in italics.

ANTRIM: Ballycastle (D1140); Belfast (J3268); Belfast, Botanic Gardens (J3372); Bush Bay (C9342); Bushfoot (C9342); Carnlough (D3241); Cavehill (J3279); Lough Neagh at Selshan (J0868); Rea's Wood (J8514); Selshan (J0868); Whitehead (D1743).

CARLOW: Cloughristick (S7069); Kilcarry (bridge) (S8962).

CAVAN: Cornafean (N3499); Farrinseer (H3401); Lough Dargan (N6092); Virginia (N5988).

CLARE: *Bally Clough*; Ballyeighter Lough (R3494); Ballynalacken (M1000); Black Head (M1410); Doolin (R0797); Fanore (M1407); Mullaghmore (Mullagh More) (R3295); Murrough (M1409); Poulavallan (M2902); Poulnaclogh Bay (M2809); Poulsallagh (M0801); The Burren (M0801); The Burren, near the Caher River (M1509).

CORK: Lodge Woods, Glengarriff (V9057); Roches, Glengarriff (V9356); Roche's Point, Glengarriff (V9356).

DERRY: Londonderry (Derry) (C4316); Somerset Forest near Coleraine (C8430).

DONEGAL: Dunfanaghy (C0237); Fairies Bridges (G8260); Finner (G8461); Isle of Doagh (C4-5-); Killybegs (G7176); Knather (G9060); Maherabeg (C2413); Sessiagh or Kill Lough (C0436).

DOWN: near Belfast (J3-7-) (near Belfast is given as being in County Down since Haliday's home, at Holywood, was near Belfast but in that county); Benagh (J2613); Donard Lodge (J3629); Donard Lodge Woods, near Newcastle (J3629); Glasdrumman (J3721); Holywood (J4079); Mourne Wood (J2616); Murlough (J4034); Newcastle (J3730); Newcastle, Tipperary Wood (J3730); River Quoile at Inch (J4748); Sliddery Ford, near Newcastle (J3934); Strangford Lough (J5849); Tipperary Wood, Newcastle (J3730); Tollymore Park (J3532); Tullybrannigan (J3531); White Water, Benagh (J2612).

DUBLIN: Ashtown Castle, Phoenix Park (O1136); Ballinascorney Gap (G.) (O0722); Ballybrack (O2523); Ballymaice (O0823); Bohernabreena (O0-2-); Bull Island (O2-3-); Bushy Park (O1329); Castleknock (O0837); near Castleknock gate, Phoenix Park (O1036); Clareville (O1431); Clondalkin (O0731); Donabate (O2349); Dublin (O1-3-); near Feltrim (O1943); Furry Glen, Phoenix Park (O1036); Glasnevin (O1537); Glenasmole (O1019); Gollierstown (O0132);

Harold's Cross (O1432); Howth (O2-3-); Ireland's Eye (O2841); Jobstown (O0626); Kilbarrack (O2439); Killakee Park (O1123); west of Kilmashogue (O1523); Kinsealy (O2143); Little Bray (O2519); Lynch Park (O0324); Lucan (O0335); Lucan Demesne (O0135); Marley (O1526); Mayfield, Rathgar (O1530); Merrion Square (O1633); Mount Anvil (O1828); Natural History Museum (Upper Merrion Street) (O1633); North Bull Island (O2-3-); near the Phoenix Mounument, the Phoenix Park (O1135); Phoenix Park (O1136); Phoenix Park, near the Castleknock Gate (O1036); Phoenix Park, pond in Zoological Gardens (O1235); Portmarnock (O2441); Portrane (O2549); Portrane Burrows (O2452); Raheny (O2238); Rogerstown (O2452); Royal Canal near Morgan's School (O0937); Rush (O2654); Saggart (O0326); Slade of Saggart (O0324); St Anne's, Clontarf (O2137); Swords Estuary (O1846); Talbot Street (O1634); The Island (O2-4-); The Slade of Saggart (O0324); Tallaght (O0927).

GALWAY: Ballinahinch (Ballynahinch) (L7647); Clifden (L6551); Funshin More (M3208); Galway (M2925).

KERRY: Black Valley near Killarney (V8-8-); Blackstones (V7186); Blackstones Bridge, Glencar (V7186); Bolus Point (Head) (V3861); Caragh Lake (V7-8-; V7-9-); Caragh Lake, on O'Donoghue's Island (V7190); Coral Strand near Sneem (V6-6-); Derrynane (Darrynane) (V5458); Dunkerron (V8970); Galway's Bridge, Killarney (V9180); Glencar (V7087); Headley Bridge (R0719); Hog's Head, Waterville (V4660); Kenmare (V9171); Kilgarvan (W0073); Killarney (V9-9-); Killarney, Cloghereen stream (V9886); Killarney, Kenmare Estate (V9591); Killarney, Long Range (V9383); Killarney, Muckross House (V9787); Killarney, Ross Castle (V9588); Killarney, Tomies Wood (V9188); Killarney, Torc Stream (V9684); Rossbehy (V6692); near Roughty Bridge, Kenmare (V9372); Slaheny Valley, Kilgarvan (W0172); West Cove (V5759); near Woodford, Killarney (W0189).

KILDARE: Carton (N9638); Donadea (N8332); Grand Canal (N9326); Kilkea Park (S7488); Landenstown (N8524); Leixlip, Royal Canal (O0035); Newbridge (N7616); Oldtown House (N9533); Royal Canal (O0035); Rye Water (N9836); Skerries Bog (S7299); Straffan (N9326); Tankardstown (S7088).

LAOIS: near Emo Park (N5109); Portarlington (N5413); Wheelahan's Bridge (N5911); Woodbrook (N5109).

LEITRIM: Bundrowes, Bundoran district (G7958); Tullaghan (G7857).

LIMERICK: Glenefy (R7829).

MAYO: Belclare (L9782); Castlebar (M1589); Carrowmore Lough (L7979); Carne, The Mullet (F6732); Cartron Point, The Mullet (F6321); Clare Island (L6-8-); The Mullet (L6-2-); Westport (L9984).

MEATH: Cross Key (Cross Keys) (N9152); Lagore (N9952); Meath coast (O1768); Ratoath (Rathoath) (O0251); River Boyne, below Trim (N7956); Trim (N7956).

ROSCOMMON: Doyle's Bridge (N0140).

SLIGO: Bunduff (G7155); Lough Gill (G7-3-); Lough Gill at Doonee Rock (G7232); Trawalua (G6-5-); Toberscanavan (G6823).

TIPPERARY: Aherlow (R9332); Bansha Wood (R9233); near Ballina (R7172); Ballinacourty (R8529); Carrigeenina (R8831); Galtymore (R8823); Lough Curra (R8724).

WATERFORD: Tramore (S5901); Tramore, back strand (S6100).

WESTMEATH: Ballinderry Lough (N2139).

WEXFORD: Ballyhighland Wood (S8840); Ballyteige (S9405); Carnsore (T1203); Clone (T0047); Curracloe (T1-2-); Oaklands (S7125); Wexford (T0-2-).

WICKLOW: Athdown (O0715); Ballinacor (T1387); Baltyboys (N9709); Ballyhubbock (S9193); Bellevue Estate (O2711); Blessington (N9814); Bray Head (O2817); coast between Bray Head and Greystones (O2-1-); Buckroney (T2979); Clara (T1792); Coan (S9892); Deputy's Pass (T2390); Devil's Glen (T2499); Dowry (O0318); Enniskerry (O2417); Glen of the Downs (O2611); Glencree (O1417); Glendalough (T1196); Glending (N9615); Glending Wood (N9615); Imaal, Leitrim (S9693); Killoughter (T2999); Knickeen (S9894); Laragh (T1496); Lough Nahanigan (Nahanagan) (T0799); Lugnaquilla (T0392); Maherabeg (T3188); Manor Kilbride (O2717); Murrough (The) (T3096); Murrough, shore of Broad Lough (T3096); Powerscourt (O2116); Powerscourt Deerpark (O2012); Rathdrum (T1888); Russborough (N9511); Russellstown Park (N9610); The Murrough, near Newcastle (O3105); Three Castles (O0116); Woodend (O0114).

The Irish counties are shown (Fig. 2).

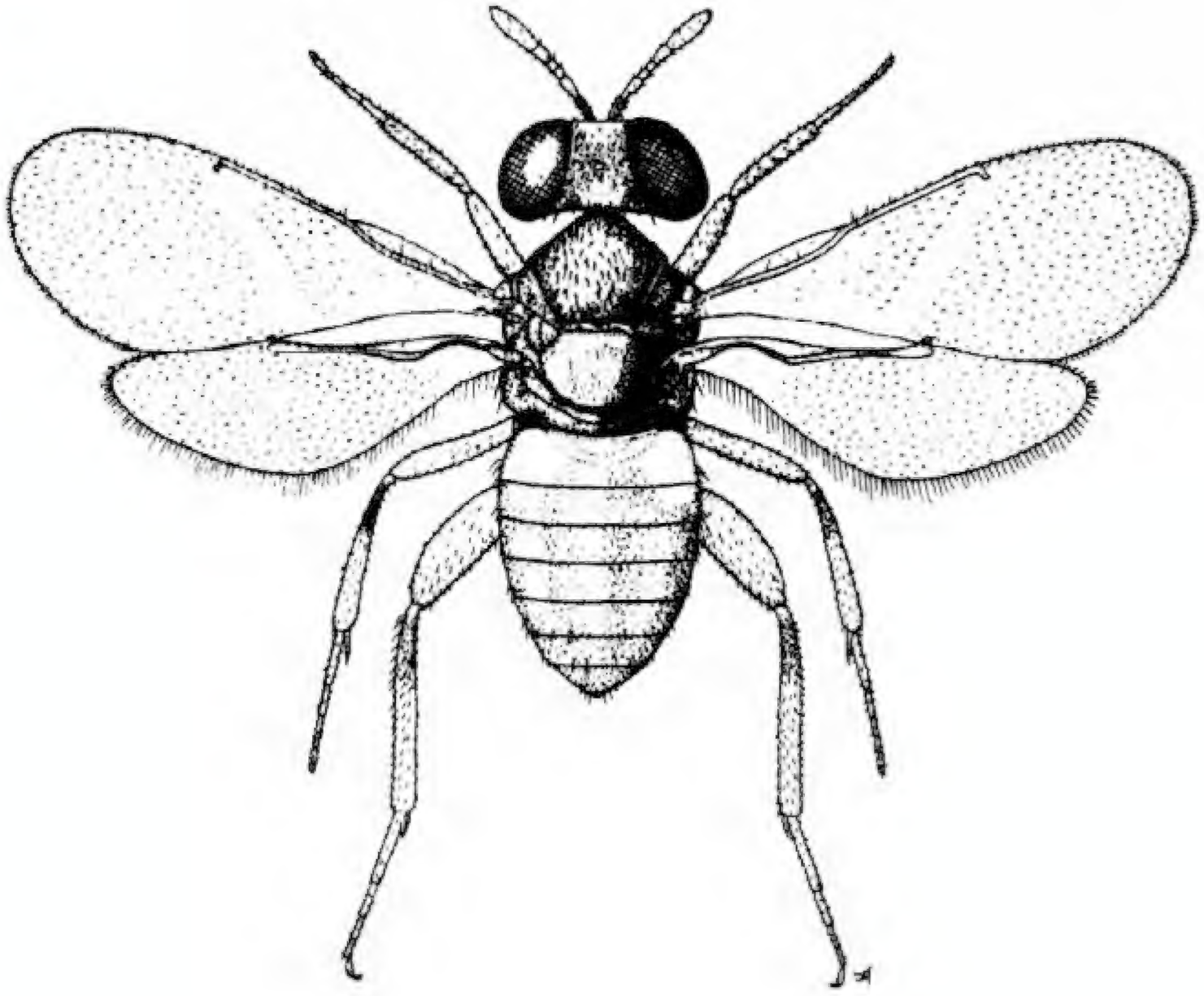
FIGURE 2: the counties of Ireland.

THE CATALOGUE

APHELINIDAE THOMSON, 1876

Very small to small species, usually squat and robust or flattened, rarely elongate; about 0.6-1.4mm in length (Fig. 3). Body varying from pale yellow to dark brown, only rarely shiny or metallic and never strongly so. The majority are parasitoids of sternorrhynchous Homoptera (Hemiptera). Some attack Aphidoidea but most develop by using coccoids (scale-insects) as hosts. Others are internal parasitoids of the eggs of various orders or primary parasitoids of aphids. The family contains some 900 species world-wide with 38 species known from Great Britain. To-date, only 11 species have been reported from Ireland.

FIGURE 3: *Aphelinus abdominalis* (Dalman).



APHELININAE THOMSON, 1876

***Aphelinus abdominalis* (Dalman, 1820)** (Fig. 3)

synonym *Aphelinus basalis* (Westwood, 1833)

DUBLIN: Saggart, 27.viii.1944, AWS (NMI) (det. MWRG) (unpublished); KERRY: Derrynane, ♀ 7.ix.1965, RRA (Askew Collection) (locality details not published) (Askew, 1967: p. 179 Eire (Kerry)). WICKLOW: Imaal, Leitrim, 21.vii.1940, AWS (NMI) (det. MWRG) (unpublished).

Ireland (Walker, 1839a: p. 2 as *Aphelinus basalis*).

***Aphelinus annulipes* (Walker, 1851)**

DOWN: Holywood, AHH (Walker, 1851: p. 211 as *Myina*; Graham, 1961c: p. 140 as *Mesidia*).

***Aphelinus asychis* Walker, 1839**

synonym *Aphelinus euthria* Walker, 1839

ANTRIM: at Belfast, AHH (Walker, 1839a: p. 3 as *Aphelinus euthria*; Graham, 1976: p. 128 as *Aphelinus euthria*. Syntype ♀, labelled 'euthria' in Haliday's handwriting upon a green label (this colour indicating Irish origin) (NMI); DOWN: near Belfast, AHH (Walker, 1839a: p. 3; Graham, 1976: p. 128).

***Aphelinus chaonia* Walker, 1839**

DOWN: at Belfast, AHH (Walker, 1839a: p. 4; Graham, 1976: p. 129).

***Aphelinus humilis* Mercet, 1927**

DOWN: Newcastle, ♀ 6.ix.1955, AWS (Graham, 1976: p. 130).

***Aphelinus subflavescens* (Westwood, 1837)**

DOWN: Holywood, near Belfast, found on oaks *Quercus*, AHH (Walker, 1839a: p. 8 misidentified as *Aphelinus flavus* (Nees, 1834); Graham, 1976: p. 144 as *Mesidiopis*).

***Aphelinus thomsoni* Graham, 1976**

DOWN: Newcastle, Tipperary Wood, ♀ (paratype) 26.ix.1958, AWS (Graham collection) (Graham, 1976: p. 132).

***Aphelinus varipes* (Förster, 1841)**

DOWN: near Newcastle, ♀ 7.viii.1957, sand-dunes, MWRG; Sliddery Ford, near Newcastle, 2♀♀ 22.viii.1957, AWS (both Graham, 1976: p. 133).

COCCPHAGINAE FÖRSTER, 1878

***Coccophagus lycimnia* (Walker, 1839)**

DOWN: near Belfast, taken in a greenhouse, AHH (Walker, 1839a: p. 11 as *Aphelinus*; Graham, 1976: p. 139).

Ireland (Noyes, 1998: CD-ROM).

***Coccophagus obscurus* Westwood, 1833**

DUBLIN: Lucan Demesne, ♀ 20.viii.1954, MWRG (Graham, 1976: p. 140).

***Encarsia formosa* Gahan, 1924**

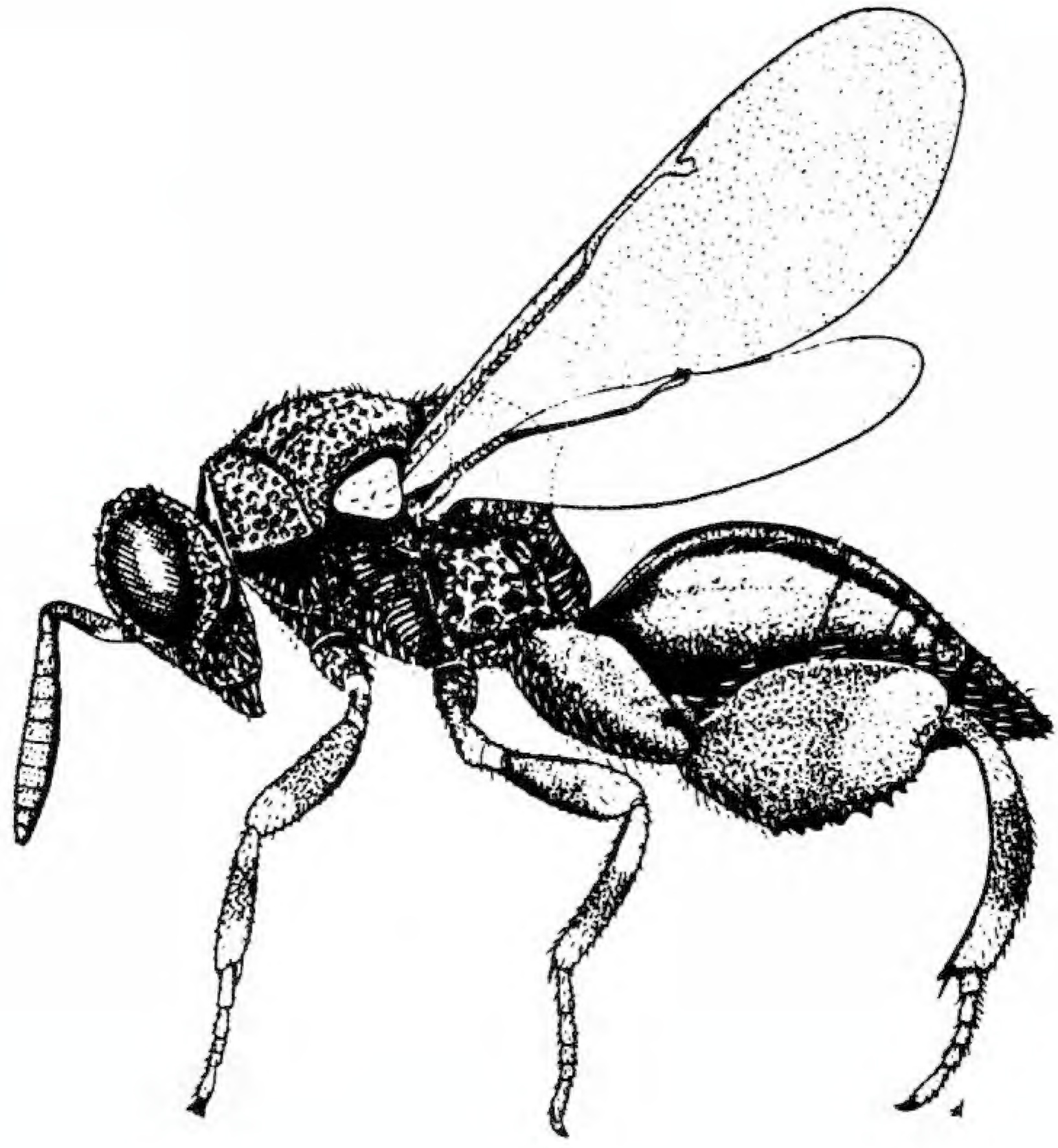
ANTRIM: Belfast, Botanic Gardens, 1990 onwards, released in glass house to control whitefly (Hemiptera: Aleyrodidae) (unpublished); DUBLIN: Agricultural Zoology Department, University College Dublin (no locality given), 1927-1954, some rearing and distribution to control whiteflies (Dunne and Donovan, 1979: p. 109); Kinsealy, 1974-1977, reared to control *Trialeurodes vaporariorum* (Westwood) (Hemiptera: Aleyrodidae) in greenhouses (Dunne and Donovan, 1979: 112-117).

Ireland (Dunne, 1972: p. 92 released in two commercial glasshouses to control whitefly; Noyes, 1998: CD-ROM).

CHALCIDIDAE LATREILLE, 1817

Body robust, about 2.5-9mm in length, strongly sculptured; blackish marked with white, yellow or red, particularly on the legs. Hind leg with femur characteristically swollen with one or more teeth on its inner margin and with tibia markedly curved (Fig. 4). Chalcidids are predominantly solitary, primary endoparasitoids of Diptera and Lepidoptera but other orders are attacked. In the British Isles, they have been reported as endoparasitoids of Coleoptera, Diptera and Hymenoptera (Symphyta) (sawflies). World-wide there are some 1,500 described species with seven known from Great Britain. By contrast, only one species has been recorded from Ireland.

FIGURE 4: *Brachymeria minuta* (L.) (drawing modified by Z. Bouček).



CHALCIDINAE LATREILLE, 1817

***Chalcis sispes* (Linnaeus, 1761)**

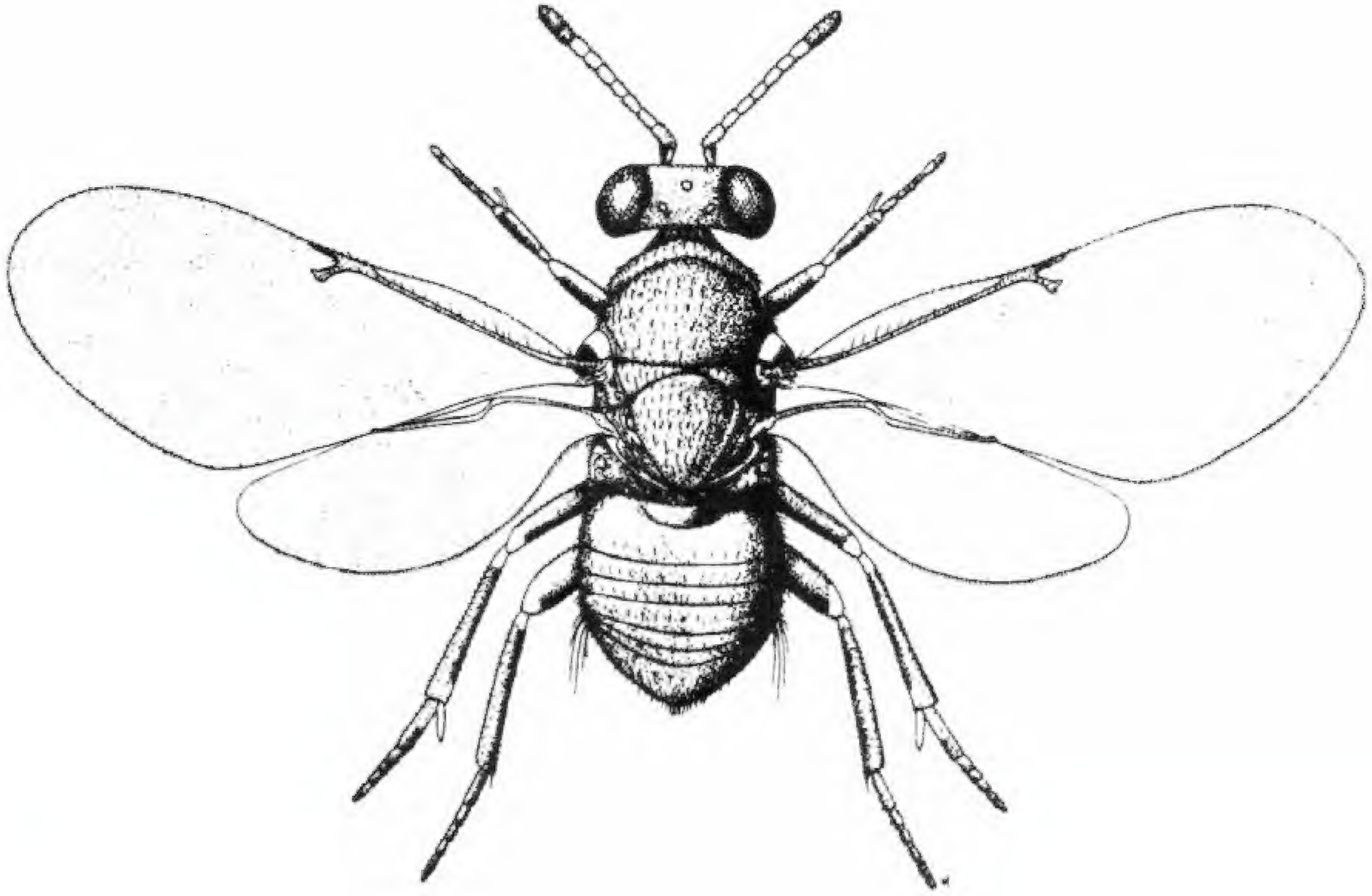
WESTMEATH: Ballinderry Lough, two specimens 3.vii.1933, on shore...on the KC-WH (i.e. Offaly (King's County) and Westmeath) boundary, EOM (one in NMI); WICKLOW: The Murrough, south of Newcastle station, 7.viii.1927, on flower-head of angelica *Angelica* in marsh, AWS (NMI) (both Stelfox, 1941: p. 338 as *Smicra*. In both places the host of *Smicra sispes* - the dipteron *Stratiomys furcata* Fabr. (now *S. singularior* (Harris) (Diptera: Stratiomyidae)) - is common).

Ireland (Ferrière and Kerrich, 1958: p. 12 A. W. Stelfox; Hedqvist, 1978: p. 288; Ashe *et al.*, 1998: p. 24).

ENCYRTIDAE WALKER, 1837

Very small to small species, usually robust but occasionally elongate or flattened. Length about 0.5-3.5mm (Fig. 5). Species are variously metallic or from yellow to orange, red or brown. Most encyrtids attack Coccoidea (scale-insects). Others are parasitoids of the larvae of Lepidoptera or hyperparasitoids *via* other Hymenoptera. World-wide, over 3,000 species have been described and some 201 of these occur in Great Britain. By contrast, only 59 species are known from Ireland.

FIGURE 5: *Blastothrix sericea* (Dalman).



ENCYRTINAE WALKER, 1837

***Ageniaspis atricollis* (Dalman, 1820)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Ageniaspis fuscicollis* (Dalman, 1820)**

DOWN: Holywood, near Belfast, found in the flowers of common ragwort *Senecio jacobea* L., AHH (Walker, 1838a: p. 420 as *Encyrtus*); DUBLIN: Ballybrack, 1942 and 1943, parasitic on the larvae of the small ermine moth *Hyponomeuta padella* L. (now *Yponomeuta*) (Lepidoptera: Yponomeutidae) on hawthorn *Crataegus* hedges, BPB (Beirne, 1943: pp 200, 202-204 and 218).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Noyes, 1998: CD-ROM).

***Aphycoides cypris* (Walker, 1838)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Aphycus apicalis* (Dalman, 1820)**

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 110 as *Encyrtus*).

***Aphycus hederaceus* (Westwood, 1837)**

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 108 as *Encyrtus*).

***Aschitus barbarus* (Dalman, 1820)**

DOWN: Holywood, AHH (Walker, 1837: p. 447 as *Encyrtus*).

Ireland (Irish specimen, det. MWRG as *Sceptrophorus*, Haliday Collection (NMI)).

***Aschitus zarina* (Walker, 1837)**

WICKLOW: Athdown, ♀ 25.vii.1943, AWS; Coan, ♀ 23.vii.1939, AWS (both Graham, 1969c: p. 265 as *Microterys*).

Ireland (Walker, 1837: p. 447 as *Encyrtus*. Mr Haliday; Graham, 1969c: p. 264; Noyes, 1998: CD-ROM).

***Baeocharis pascuorum* Mayr, 1876**

DOWN: Sliddery Ford, near Newcastle, ♀ 6.ix.1955, AWS (Graham, 1970: p. 275).

***Blastothrix sericea* (Dalman, 1820)** (Fig. 5)

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1838a: p. 106 as *Encyrtus*. Mr Haliday).

****Bothriothorax aralius* (Walker, 1837)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

****Bothriothorax clavicornis* (Dalman, 1820)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Cerchysius subplanus* (Dalman, 1820)**

synonym *Encyrtus urocerus* Dalman, 1820

synonym *Encyrtus melanopus* Walker, 1837

DOWN: near Belfast, August, on the coast, AHH (Walker, 1837: p. 453 as *Encyrtus melanopus*; Graham, 1969c: pp 240-241 Haliday's collection contains 7 males regarded as syntypes (alloted Nos: 455-456, 480-484). No. 480 has a green label "*melanopus*", 482 and 484 each bear a white label "Coast Aug."; the others are unlabelled but are indicated as Irish. No. 480 is designated as lectotype; it has the most complete data and on the whole fits the description best (NMI); DUBLIN: North Bull (Island), 2.viii.1944, AWS (det. MWRG) (NMI) (unpublished); Portmarnock (Port Marnock), AHH (Walker, 1837: p. 440 as *Encyrtus urocerus*); KILDARE: Royal Canal, 8.vii.1945, AWS (det. MWRG) (NMI) (unpublished).

Ireland (Graham, 1969c: p. 241 specimens from the British Isles (particularly those from Ireland) tend to be darker than those from Sweden).

***Cercobelus jugaeus* (Walker, 1837)**

DOWN: near Belfast, on box-trees *Buxus sempervirens* L., AHH (NMI) (Walker, 1837: p. 48 as *Encyrtus*; Graham, 1969c: p. 292).

Ireland (Six Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Noyes, 1998: CD-ROM).

***Cheilonerus argentifer* (Walker, 1837)**

DOWN: Newcastle (NCastle), AHH (NMI) (Graham, 1969c: pp 274-275 in the Haliday collection, there is a female specimen (to which I have given a serial number 87) which fits the

description of *argentifer* almost perfectly; but it bears a green label on which is written in Haliday's handwriting "NCastle"... Although this specimen cannot be the type, it must certainly be the true *argentifer* (NMI)).

Ireland (Noyes, 1998: CD-ROM).

Choreia inepta (Dalman, 1820)

DUBLIN: Portmarnock (Port Marnock), AHH (Walker, 1838a: p. 431 as *Encyrtus*); The Island, 22.vii.1943, AWS (det. MWRG) (NMI) (unpublished).

***Copidosoma agrotis* (Fonscolombe, 1832)**

CLARE: Fanore, sand-dunes at, ♂ ♀ 10.viii.1955, AWS (Graham, 1970: p. 278 as *Litomastix*).

***Copidosoma anceus* (Walker, 1837)**

Ireland (Graham, 1994: p. 183 I have had no difficulty in separating females of these two species (*C. anceus* and *C. flagellare*) from...Ireland).

***Copidosoma babas* (Walker, 1837)**

DOWN: near Belfast, AHH (Walker, 1837: p. 44 as *Encyrtus*; Graham, 1969c: p. 303; Noyes, 1998: CD-ROM).

******Copidosoma chalconotum* **(Dalman, 1820)**

Ireland (Irish specimen, det. MWRG as *Litomastix*, Haliday Collection (NMI)).

New to Ireland.

***Copidosoma dius* (Walker, 1837)**

DOWN: near Belfast, AHH (Walker, 1837: p. 39 as *Encyrtus*); DUBLIN: North Bull Island, salt marsh, June 1960-1963, BH (det. MWRG) (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153 as *Encyrtus*).

***Copidosoma filicorne* (Dalman, 1820)**

DUBLIN: North Bull Island, salt marsh, August 1960-1963, BH (det. MWRG) (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153).

***Copidosoma flagellare* (Dalman, 1820)**

Ireland (Graham, 1994: p. 183 I have had no difficulty in separating females of these two species (*C. anceus* and *C. flagellare*) from...Ireland).

***Copidosoma fuscisquama* (Thomson, 1876)**

WICKLOW: The Glen of the Downs, 2♀♀ 23.viii.1954, MWRG (Graham, 1970: p. 278 as *Litomastix*).

****Copidosoma truncatellum* (Dalman, 1820)**

DUBLIN: Ballinascorney Gap (B's'c'rny G.), 12.viii.1945, AWS (NMI); KILDARE: Royal Canal, 3.viii.1941, AWS (NMI) (both det. MWRG).

Ireland (Irish specimen, det. MWRG as *Litomastix*, Haliday Collection (NMI)).

New to Ireland.

***Discodes anthores* (Walker, 1848)**

Ireland (Walker, 1848: p. 135 as *Encyrtus*. From Mr Walker's collection; Graham, 1969c: p. 281 in the British Museum (Nat. Hist.) one female stands under this name; I now designate it lectotype. From the style of mounting, also the locality (Ireland) I suspect that it was captured by Haliday (BMNH); Noyes, 1998: CD-ROM).

***Encyrtus infidus* (Rossi, 1790)**

synonym *Eucomys scutellata* Swederus, 1795

KERRY (South): Slaheny Valley, Kilgarvan, 29.vi.1935, swept in a roadside marsh, AWS (Stelfox, 1941: p. 338 as *Eucomys scutellata*).

Ireland (Irish specimen, det. MWRG as *Encyrtus scutellata*, Haliday Collection (NMI)).

***Homalotyloidea dahlbomii* (Westwood, 1837)**

DOWN: near Belfast, AHH; DUBLIN: Portmarnock (Port Marnock), AHH (Walker, 1837: p. 53 as *Encyrtus*).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Noyes, 1998: CD-ROM).

***Mahencyrtus comara* (Walker, 1837)**

Ireland (Walker, 1837: p. 446 as *Encyrtus*. Mr Haliday; Graham, 1969c: p. 285 In Haliday's collection, however, there is a male, with a green label "*comara*", the green label indicating Irish origin; as this specimen agrees well with Walker's description, I designate it as lectotype (NMI); Noyes, 1998: CD-ROM).

***Metaphycus chermis* (Fonscolombe, 1832)**

synonym *Metaphycus fulvifrons* (Walker, 1838)

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 109 as *Encyrtus fulvifrons*; Graham, 1969c: p. 230 as *Metaphycus fulvifrons*. In Haliday's collection there are two specimens labelled "fulvifrons", one of which is indicated as Irish. The latter specimen is a female bearing a green label on which is written "fulvifrons" in Haliday's handwriting, while the pin which carries the card has its head covered with green sealing wax (one of Haliday's methods of indicating Irish origin); this specimen is now designated as lectotype (NMI)); DUBLIN: Lucan Demesne, ♀ 20.viii.1954, MWRG (Graham, 1969c: p. 231 as *Metaphycus fulvifrons*).

Ireland (Noyes, 1998: CD-ROM as *Metaphycus fulvifrons*; Guerrieri and Noyes, 2000: p. 198 lectotype ♀ of *Encyrtus*, Ireland, NMID, not examined).

***Metaphycus melanostomatus* (Timberlake, 1916)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Metaphycus pappus* (Walker, 1838)**

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 107 as *Encyrtus*; Graham, 1969c: p. 231 Haliday's collection contains one female bearing a green label "*pappus*" in his handwriting; the pin on which the card is staged has the head covered with green sealing-wax. This specimen, which is conspecific with the lectotype, is clearly a syntype and has been labelled as such (NMI)).

Ireland (Noyes, 1998: CD-ROM).

***Metaphycus petitus* (Walker, 1851)**

Ireland (Walker, 1851: p. 211 as *Encyrtus*. In Mr Haliday's collection; Graham, 1969c: pp 231-232 this female, which is certainly a Haliday specimen from the style of mounting, is carded, and bears a green label; the head of the pin is covered with green sealing-wax. A green label and green wax were two methods used by Haliday to indicate Irish origin. Thus the specimen fulfils the requirements and I confidently designate it as type of *petitus* (NMI); Noyes, 1998: CD-ROM; Guerrieri and Noyes, 2000: pp 173 and 175 lectotype ♀, Ireland, NMID, not examined).

***Metaphycus punctipes* (Dalman, 1820)**

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 108 as *Encyrtus*).

Ireland (Stephens, 1835: illustrations p. 9 as *Eucyrtus*. North of Ireland).

***Microterys subcupratus* (Dalman, 1820)**

Ireland (Walker, 1837: p. 461 as *Encyrtus*. Mr Haliday).

***Microterys sylvius* (Dalman, 1820)**

GALWAY: Galway, on lime-trees *Tilia*, AHH (Walker, 1838a: p. 103 as *Encyrtus*).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

***Microterys tanais* (Walker, 1837)**

DOWN: near Belfast, AHH (Walker, 1837: p. 52 as *Encyrtus*).

***Microterys tessellatus* (Dalman, 1820)**

DUBLIN: North Bull Island, salt marsh, July 1960-1963, BH (det. MWRG) (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

***Parablatticida brevicornis* (Dalman, 1820)**

synonym *Encyrtus gabestus* Walker, 1838

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 116 as *Encyrtus gabestus*).

Ireland (Irish ♀ of *Encyrtus gabestus*, det. MWRG, Haliday Collection (under *Amaurilyma brevicornis*) (NMI) (unpublished); Walker, 1848: p. 133 as *Encyrtus gabestus*. From Mr Walker's collection; Noyes, 1998: CD-ROM).

***Prionomitus mitratus* (Dalman, 1820)**

synonym *Encyrtus coniferae* Walker, 1837

Ireland (Walker, 1837: p. 461 as *Encyrtus coniferae*. Mr Haliday; Graham, 1969c: p. 245 I designate as lectotype (of *Encyrtus coniferae*) no. 515, a female which is indicated as Irish and bears a green label on which is written "*coniferae*" in Haliday's handwriting (Haliday collection, NMI) (there is another Irish specimen in the collection); Noyes, 1998: CD-ROM).

****Prionomitus tiliaris* (Dalman, 1820)**

ANTRIM: Whitehead, 31.vii.1931, AWS (NMI); DUBLIN: Saggart, 18.iv.1935, AWS (NMI) (both det. MWRG).

New to Ireland.

***Pseudencyrtus idmon* (Walker, 1848)**

DOWN: Tipperary Wood, Newcastle, ♀ 26.ix.1958, swept from foliage of grey willow *Salix cinerea* L., MWRG (Graham, 1970: p. 280 as *Syrphophagus*).

***Psyllaephagus pilosus* Noyes, 1988**

KERRY: (Kilgarvan), 1998, released into the wild from France to control *Ctenarytaina eucalypti* Maskell (Hemiptera: Psyllidae) on *Eucalyptus*, now established (NMI) (Purvis *et al.*, 1998-1999: no pagination given).

***Syrphophagus aeruginosus* (Dalman, 1820)**

synonym *Encyrtus thinaeus* Walker, 1837

DOWN: near Belfast, AHH (Walker, 1837: p. 42 as *Encyrtus thinaeus*).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Syrphophagus ariantes* (Walker, 1837)**

synonym *Encyrtus scythis* Walker, 1838

DOWN: near Belfast, AHH (Walker, 1837: p. 45 as *Encyrtus*); Holywood, near Belfast, AHH (Walker, 1838a: p. 118 as *Encyrtus scythis*).

Ireland (Irish specimen of *Encyrtus scythis*, det. MWRG, Haliday Collection (NMI) (unpublished); Noyes, 1998: CD-ROM).

****Syrphophagus herbidus* (Dalman, 1820)**

DUBLIN: Harold's Cross, in tram, 28.vii.1932, AWS (det. MWRG) (NMI).

New to Ireland.

****Syrphophagus hyalipennis* (Mayr, 1876)**

synonym *Aphidencyrtus hyalipennis* (Mayr, 1876)

Ireland (Irish specimen, det. MWRG as *Aphidencyrtus*, Haliday Collection (NMI)).

New to Ireland.

***Thomsonisca amathus* (Walker, 1838)**

DOWN: Holywood, near Belfast, found on goat willow *Salix caprea* L., AHH (Walker, 1838a: p. 421 as *Encyrtus*; Graham, 1969c: p. 236 the syntype female in Haliday's collection has more complete data as it bears two labels, both in Haliday's handwriting; these read "On *Salix caprea*" and "*amathus*" (the latter on a green label, indicating Irish origin (NMI)).

Ireland (Noyes, 1998: CD-ROM).

***Trechnites alni* Erdös, 1957**

DONEGAL: Maherabeg, near Donegal, ♀♀ 17.ix.1958, swept from the foliage of grey willow *Salix cinerea*, MWRG (Graham, 1970: p. 280).

***Trichomasthus cyaneus* (Dalman, 1820)**

DOWN: near Belfast, AHH (Walker, 1837: p. 442 as *Encyrtus*).

***Trichomasthus gabinius* (Walker, 1837)**

Ireland (Walker, 1837: p. 444 as *Encyrtus gabinus*. Found by Mr Haliday).

***Xenaphycus flavovarius* (Mercet, 1921)**

DOWN: Newcastle, ♀ 29.vi.1957, MWRG (Graham, 1970: p. 279 as *Paraphycus*).

***Zaomma lambinus* (Walker, 1838)**

synonym *Encyrtus euryclea* Walker, 1844

synonym *Apterencyrtus microphagus* (Mayr, 1876)

DOWN: Holywood, near Belfast, AHH (Walker, 1844: p. 184 as *Encyrtus euryclea*; Graham, 1969c: p. 271 as *Apterencyrtus microphagus*. In the old Hope-Westwood collection at Oxford there is a female *Apterencyrtus* which is certainly a Haliday specimen; it bears a green label (indicating Irish origin) on which is written "n. sp." in Haliday's handwriting, also a white label (in Walker's handwriting) reading "*Euryclea*". There could hardly be clearer evidence that this is original material, and as the specimen fits the description, it is now designated as lectotype (OUM)).

Ireland (Noyes, 1998: CD-ROM).

TETRACNEMINAE HOWARD, 1892

***Anagyrus belibus* (Walker, 1837)**

synonym *Encyrtus barca* Walker, 1838

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 116 as *Encyrtus barca*).

***Anusia nasicornis* Förster, 1860**

WICKLOW: coast between Bray Head and Greystones, ♂ 16.viii.1954, MWRG (Graham, 1970: p. 275).

***Dinocarsis hemiptera* (Dalman, 1820)**

DUBLIN: Ireland's Eye, 30.vii.1941, AWS (NMI); The Island, 22.vii.1943, AWS (det.

MWRG) (NMI) (both unpublished).

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1837: p. 451 as *Encyrtus*).

***Ericydnus sipylus* (Walker, 1837)**

synonym *Ericydnus aemnestus* Walker, 1850

ANTRIM: Cavehill, ♀ 25.viii.1846, AHH (NMI) (Graham, 1991a: p. 188 probably the holotype of *Ericydnus aemnestus* (NMI)).

Ireland (Walker, 1850: p. 133 as *Ericydnus aemnestus*. In Mr Haliday's collection).

***Ericydnus strigosus* (Nees, 1834)**

DOWN: Holywood, AHH (Walker, 1837: p. 364); DUBLIN: Portmarnock (Port Marnock), on the sea-coast, AHH (Walker, 1837: p. 364); KERRY: Coral Strand near Sneem, ♂ 2.ix.1965, RRA (Askew Collection) (unpublished); WICKLOW: Dowry, 5.viii.1945, AWS (det. MWRG) (NMI) (unpublished).

Ireland (Three Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Graham, 1991a: p. 186).

***Ericydnus ventralis* Dalman, 1820**

synonym *Ericydnus paludatus* Haliday in Walker, 1837

DOWN: Holywood, AHH (Walker, 1837: p. 364 as *Ericydnus paludatus*); DUBLIN: Portmarnock (Port Marnock), AHH (NMI) (Walker, 1837: p. 364 as *Ericydnus paludatus*; Kerrich, 1967: p. 168 ♂, type of *paludatus* (Haliday ms.) Walker. This author erroneously cited the locality as being 'Co. Down'; Graham, 1991a: p. 182 the second specimen, is labelled in Haliday's handwriting '655' and 'paludatus' (on a green label, indicating Irish origin) - lectotype (NMI); WICKLOW: Buckroney, 14.viii.1946, AWS (NMI); Three Castles, 31.vii.1946, AWS (NMI) (det. MWRG) (both unpublished).

Ireland (Graham, 1991a: p. 182; Noyes, 1998: CD-ROM).

***Rhopus piso* (Walker, 1838)**

DOWN: Holywood, near Belfast, AHH (Walker, 1838a: p. 424 as *Encyrtus*; Graham, 1969c: p. 222 ♂ syntype bearing a green label (indicating Irish origin) and a label "piso" in Haliday's handwriting in the Haliday Collection (NMI)).

Ireland (Four other Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished);

Noyes, 1998: CD-ROM).

EULOPHIDAE WESTWOOD, 1829

Extremely small to small insects (0.4-6mm in length) (Fig. 6). The body varies from squat to elongate, robust to dorso-ventrally flattened. The colouration ranges from yellowish through to brownish with darkish markings, these sometimes metallic or indeed the body entirely metallic. Most are primary parasitoids of concealed larvae especially leaf-miners. Gall-formers are also attacked. However others have a wide-variety of life-cycles. Over 3,000 species are known world-wide and some 391 of these have been reported from Great Britain. By contrast, only 140 species have been recorded in Ireland.

ENTEDONINAE FÖRSTER, 1856

***Achrysocharoides insignitellae* (Erdös, 1966)**

CLARE: The Burren, 4♀♀ reared 27.viii.1969 from mines of a *Phyllonorycter*, probably *P. insignitella* (Zeller) (Lepidoptera: Gracilariidae), on red clover *Trifolium pratense* L. collected on 15.viii.1969, E. C. Pelham-Clinton (Askew and Ruse, 1974: p. 267 as *Enaysma*; Bryan, 1980: p. 259).

***Achrysocharoides latreillii* (Curtis, 1826)**

Ireland (Irish specimen, det. MWRG as *Enaysma*, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 32 as *Entedon*).

***Asecodes lucens* (Nees, 1834)**

synonym *Entedon mento* Walker, 1839

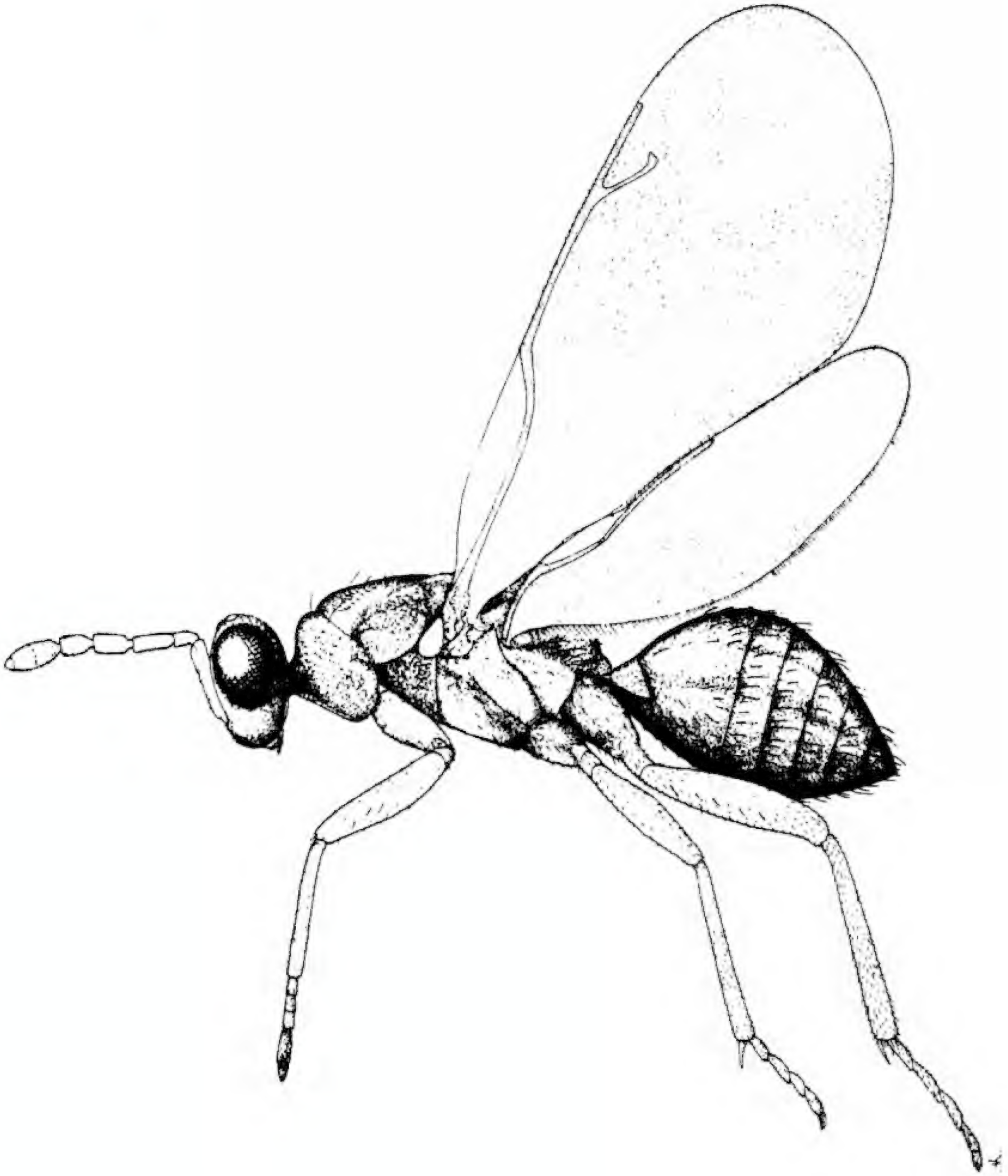
ANTRIM: Belfast, AHH (Walker, 1839a: p. 28 as *Entedon mento*); WICKLOW: Lugnaquilla (Lug), 2,000 ft, 20.viii.1939, AWS (det. MWRG as *Asecodes mento*) (NMI) (unpublished).

Ireland (Irish specimen of *Asecodes mento*, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Asecodes turcicus* (Nees, 1834)**

DOWN: Donard Lodge, Newcastle, 5.ix.1955, AWS (Graham Collection as *Desmatocharis*) (BMNH) (unpublished); Holywood, near Belfast, AHH (Walker, 1839a: p. 23 as *Entedon*); Newcastle, 26.ix.1958, AWS (Graham Collection as *Desmatocharis*) (BMNH) (unpublished)

FIGURE 6: ***Eulophus ramicornis*** **(Fabr.).**



Tullymore Park, AHH (both Walker, 1839a: p. 23 as *Entedon*); KILDARE: Royal Canal (Graham Collection as *Desmatocharis*) (BMNH) (unpublished).

Ireland (Bouček and Askew, 1968a: p. 129 as *Desmatocharis*. Britain including Ireland; Noyes, 1998: CD-ROM).

***Ceranisus menes* (Walker, 1839)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Ceranisus pacuvius* (Walker, 1838)**

Ireland (Three Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1838b: p. 383 as *Cirrospilus*. Mr Haliday).

***Chrysocharis amasis* (Walker, 1839)**

synonym *Chrysocharis larina* (Walker, 1839)

Ireland (Irish specimen, det. MWRG as *Epilampsis larina*, Haliday Collection (NMI)).

New to Ireland.

***Chrysocharis amyite* (Walker, 1839)**

KERRY: Killarney, ♀ emerged 31.x.1966 from *Agromyza nana* Meigen (Diptera: Agromyzidae) collected on *Trifolium repens* L., GCDG (Askew Collection) (unpublished).

Ireland (Walker, 1839a: p. 66 as *Entedon*. Mr Haliday).

***Chrysocharis argyropezae* Graham, 1963**

DUBLIN: Bushy Park, ♀ (paratype) 28.x.1955, AWS (Graham Collection) (BMNH) (Graham, 1963: pp 212, 213 and 215 the Irish paratype differs in some colouration from the English type).

Ireland (Bouček and Askew, 1968a: p. 104 Britain, including Ireland; Hansson, 1985: p. 88; Noyes, 1998: CD-ROM).

***Chrysocharis gemma* (Walker, 1839)**

DUBLIN: Bushy Park (Pk), 19.xi.1954, AWS (NMI); Marley, 8.iv.1943, AWS (NMI) (both det. MWRG) (both unpublished); same locality, ♀ (BMNH) (Hansson, 1985: p. 86 as Marly); WICKLOW: Glen of the Downs, August 1954, MWRG (Graham Collection) (BMNH) (unpublished).

Ireland (Hansson, 1985: p. 86; Noyes, 1998: CD-ROM).

***Chrysocharis laomedon* (Walker, 1839)**

synonym *Entdon sartamus* Walker, 1839

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 50 as *Entedon*. Mr Haliday; Walker, 1839a: p. 55 as *Entedon sartamus*. Mr Haliday).

***Chrysocharis nephereus* (Walker, 1839)**

synonym *Entedon erigone* Walker, 1839

synonym *Entedon matho* Walker, 1839

KERRY: Glencar, ♀ 11.ix.1965, on birch *Betula*, RRA (Askew Collection) (unpublished);

TYRONE (TY): no locality, ♂ ♀ from *Rhynchaenus fagi* (L.) (Coleoptera: Curculionidae) (ZB collection); (Hansson, 1985: p. 68).

Ireland (Walker, 1839a: p. 44 as *Entedon erigone*. Mr Haliday; Walker, 1839a: p. 51 as *Entedon matho*. Mr Haliday; Hansson, 1985: p. 69; Noyes, 1998: CD-ROM).

***Chrysocharis nitidifrons* Graham, 1963**

WICKLOW: The Murrough, 2♂♂ (paratypes) 1.v.1950, MWRG (Graham, 1963: p. 223); no locality, ♂ (BMNH) (Hansson, 1985: p. 76 as WI).

Ireland (Bouček and Askew, 1968a: p. 113 Britain, including Ireland; Hansson, 1985: p. 76; Noyes, 1998: CD-ROM).

***Chrysocharis orbicularis* (Nees, 1834)**

synonym *Entedon abrota* Walker, 1839

synonym *Chrysocharis naenia* (Walker, 1839)

KERRY: Black Valley near Killarney, ♂ emerged 13.x.1966 and ♂ emerged 5.xi.1966 from *Phytomyza minuscula* Goureau (Diptera: Agromyzidae) (det. GCDG) collected 6.ix.1966 on cultivated columbine *Aquilegia* sp., GCDG (Askew Collection; NMI); MEATH: Cross Key, 28.v.1933, AWS (NMI) (det. MWRG) (both unpublished).

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 62 as *Entedon abrota*. Mr Haliday; Noyes, 1998: CD-ROM as *Chrysocharis abrota*).

***Chrysocharis pallipes* (Nees, 1834)**

synonym *Entedon chilo* Walker, 1839

synonym *Entedon parmys* Walker, 1839

CARLOW: Cloughristick, 19.vi.1982, JMOC (NMI); DUBLIN: Clondalkin (C'l'd'k'n),

26.iii.1944, AWS (both det. MWRG) (both unpublished); no locality, ♂ (BMNH); KILDARE: ♂ (BMNH) (both Hansson, 1985: p. 29 as *Chrysocharis chilo*); WICKLOW: Powerscourt, 27.viii.1931, AWS; Russborough, 16.iv.1982, JMOC (NMI) (all det. MWRG) (all unpublished).

Ireland (Walker, 1839a: p. 64 as *Entedon chilo*. Mr Haliday; Walker, 1839a: p. 71 as *Entedon parmys*. Mr Haliday; Hansson, 1985: p. 29 as *Chrysocharis chilo*; Noyes, 1998: CD-ROM as *Chrysocharis chilo*).

***Chrysocharis polyzo* (Walker, 1839)**

synonym *Entedon enephes* Walker, 1839

Ireland (Walker, 1839a: p. 67 as *Entedon enephes*. Mr Haliday).

****Chrysocharis prodice* (Walker, 1839)**

CORK: Lodge Woods, Glengarriff, 23.vii.1935, AWS (NMI); KILDARE: Straffan, 14.xi.1981, in vegetation beside the Grand Canal, JPOC (NMI); WICKLOW: Glen of (o') the Downs, 27.viii.1981, JPOC (NMI) (all det. MWRG).

New to Ireland.

***Chrysocharis pubicornis* (Zetterstedt, 1838)**

synonym *Entedon amyrtaeus* Walker, 1839

CLARE: Ballynalacken, ♀ emerged 3.ix.1966, 2♂♂ emerged 20.ix.1966, ♀ emerged 22.ix.1966, ♂ emerged 27.ix.1966, ♀ emerged 29.ix.1966 and ♀ emerged 24.iii.1967 from *Chromatomyia lonicerae* (Robineau-Desvoidy) (synonym *Chromatomyia xylostei* (Kaltenbach)) on snowberry *Symphoricarpos albus* (L.) collected on 28.viii.1966, GCDG (Askew Collection; NMI); same locality, ♂ emerged 21.ix.1966 from *Chromatomyia lonicerae* collected 2.ix.1966 on honeysuckle *Lonicera periclymenum* L., GCDG (Askew Collection); Burren near Bally Clough, ♀ emerged 17.xi.1966 from *Chromatomyia* (*Phytomza*) *syngenesiae* Hardy (Diptera: Agromyzidae) collected 4.ix.1966 on tansy *Tanacetum vulgare* L., GCDG (Askew Collection); Doolin, ♂ emerged 15.iii.1967 from *Chromatomyia syngenesiae* collected 28.viii.1966 on ragwort *Senecio jacobaea*, GCDG (Askew Collection); Poulavallan, ♂ ♀ emerged 8.x.1966 from *Phytomyza lonicerella* (=?*Chromatomyia lonicerae* (Robineau-Desvoidy)) (Diptera: Agromyzidae) (det. GCDG) on honeysuckle *Lonicera periclymenum* L., GCDG (Askew Collection; NMI) (unpublished); DUBLIN: Harold's Cross, 17.ix.1941, garden 10p.m., AWS

(det. MWRG) (unpublished); North Bull Island, salt marsh, July 1960-1963, BH (det. MWRG) (NMI) (Healy, 1975: p. 237; Speight and Healy, 1977: p. 153); no locality, 2♂♂ (BMNH) (Hansson, 1985: p. 50); KERRY: Coral Strand, Sneem, ♀ 2.ix.1965, RRA (Askew Collection) (unpublished); MEATH: no locality, ♂ (BMNH) (Hansson, 1985: p. 50).

Ireland (Walker, 1839a: p. 58 as *Entedon amyrtaeus*. Mr Haliday; Hansson, 1985: pp 50-51 ♂ 2♀♀ from *Phytomyza crassiseta* Zetterstedt (Diptera: Agromyzidae), ♀ from *Chromatomyia* (*Phytomyza*) *aprilina* (Goureau) (Diptera: Agromyzidae) (BMNH); Noyes, 1998: CD-ROM).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Chrysocharis viridis* (Nees, 1834)**

synonym *Chrysocharis melaenis* (Walker, 1839)

synonym *Chrysocharis albula* Delucchi, 1954

CLARE: Fanore, ♀ emerged 18.x.1966 and ♀ emerged 19.x.1966 from *Phytomyza angelicastri* Hering (Diptera: Agromyzidae) (det. GCDG) collected 2.ix.1966 on wild angelica *Angelica sylvestris* L., GCDG (Askew Collection; NMI) (MNI specimen det. RRA as *Chrysocharis melaenis*) (unpublished); Poulavallan, ♀ emerged 3.x.1966 from *Phytomyza lonicerella* collected on 30.ix.1966, GCDG (Askew Collection) (unpublished); DOWN: Donard Lodge, 5.ix.1955, AWS (Graham Collection) (BMNH); Newcastle, 26.ix.1958, AWS (Graham Collection) (BMNH) (both unpublished); KILDARE: Royal Canal, ♀ 22.viii.1954 (Graham, 1963: p. 231 as *Chrysocharis albula*. I have an Irish female which has the distal half of the hind coxae white. This would seem to be outside the likely range of variation of *melaenis* because in general Irish specimens of many chalcidoid species tend to be darker than English ones); no locality, ♀ (BMNH) (Hansson, 1985: p. 33).

Ireland (Hansson, 1985: p. 34; Noyes, 1998: CD-ROM).

***Derostenus gemmeus* Westwood, 1833**

Ireland (Walker, 1839a: p. 31 as *Entedon*).

***Entedon abdera* Walker, 1839**

Ireland (Walker, 1839a: p. 98 Mr Haliday).

***Entedon diotimus* Walker, 1839**

DUBLIN: North (N.) Bull (Island), 24.vi.1926, EOM (det. MWRG) (NMI) (unpublished); North Bull Island, salt marsh, June 1960-1963, BH (det. MWRG) (NMI) (Healy, 1975: p. 237;

Speight and Healy, 1977: p. 153); WICKLOW: The Murrough, ♀ 11.vi.1950, AWS (BMNH) (RRA pers. comm.) (unpublished).

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 101 Mr Haliday; Bouček and Askew, 1968a: p. 80 Britain including Ireland; Noyes, 1998: CD-ROM).

***Entedon mera* Walker, 1839**

Ireland (Walker, 1839a: p. 97 Mr Haliday; Noyes, 1998: CD-ROM).

***Entedon pharnus* Walker, 1839**

DONEGAL (East): Isle of Doagh, 2♀♀ 21.vi.1955, AWS (Graham, 1963: p. 191).

Ireland (Bouček and Askew, 1968a: p. 85 Britain including Ireland; Noyes, 1998: CD-ROM).

***Entedon sparetus* Walker, 1839**

DUBLIN: at Portmarnock (Port Marnock), AHH (Walker, 1839a: p. 103).

Ireland (Graham, 1963: p. 195 on the east coast...it has been taken (in dunes and saltmarsh) by Mr Stelfox and me; Bouček and Askew, 1968a: p. 85 Britain including Ireland; Noyes, 1998: CD-ROM).

****Entedon subovatus* Thomson, 1878**

WICKLOW: The Murrough, ♂ 11.vi.1950, AWS (BMNH) (RRA pers. comm.).

New to Ireland.

***Ionympha carne* (Walker, 1839)**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 123 as *Entedon*).

Ireland (Seven Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Ionympha ochus* (Walker, 1839)**

DOWN: near Belfast, AHH (Walker, 1839a: p. 21 as *Entedon*).

Ireland (Thirteen Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Mestocharis bimacularis* (Dalman, 1820)**

synonym *Entedon arisba* Walker, 1839

WICKLOW: Glending Wood (Wd), 23.viii.1942, AWS (det. MWRG) (NMI) (unpublished).

Ireland (Four Irish specimens, det MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 121 as *Entedon arisba*. April; in hay-stacks, on the box, etc. Mr Haliday; Bouček *et al.*, 1963: p. 9 A. W. Stelfox; Hedqvist, 1978: p. 288; Ashe *et al.*, 1998: p. 25; Noyes, 1998:

CD-ROM as *Mestocharis arisba*).

***Neochrysocharis aratus* (Walker, 1838)**

Ireland (Walker, 1848: p. 145 as *Cirrospilus*. From Mr Walker's collection).

***Omphale aetius* (Walker, 1839)**

DOWN: Tollymore Park, ♀♀ 24.vi.1957, MWRG (Graham, 1963: p. 267 also some males, taken at the same time, which are probably conspecific); WICKLOW: Athdown, 19.vi.1938, AWS (NMI) (det. MWRG) (unpublished).

Ireland (Walker, 1839a: p. 79 as *Entedon*. Mr Haliday; Bouček and Askew, 1968a: p. 132 Britain including Ireland; Noyes, 1998: CD-ROM).

***Omphale betulicola* Graham, 1963**

WICKLOW: Athdown, ♂ 3♀♀ (paratypes) 13.viii.1954, swept from foliage of *Betula* spp, MWRG (Graham, 1963: p. 265).

Ireland (Bouček and Askew, 1968a: p. 132 Britain including Ireland; Noyes, 1998: CD-ROM).

***Omphale chryseis* Graham, 1963**

CLARE: Poulsallagh, ♀ (paratype) 9.viii.1955, AWS (Graham, 1963: p. 255).

Ireland (Bouček and Askew, 1968a: p. 132 Britain including Ireland; Noyes, 1998: CD-ROM).

***Omphale coilus* (Walker, 1839)**

Ireland (Walker, 1839a: p. 80 as *Entedon*. Mr Haliday; Graham, 1963: p. 267).

***Omphale connectens* Graham, 1963**

DOWN: Newcastle, ♀ (paratype) 29.vi.1957 and ♀ (paratype) 3.vii.1957, swept, sand-dune vegetation, MWRG; DUBLIN: Ireland's Eye, ♀ (paratype) 30.vii.1941, AWS (both Graham, 1963: p. 262).

Ireland (Bouček and Askew, 1968a: p. 133 Britain including Ireland; Noyes, 1998: CD-ROM).

***Omphale epaphus* (Walker, 1839)**

DOWN: Newcastle, 21 Tullybrannigan Road, ♀ 16.vii.1957, in the garden, AWS (Graham, 1963: p. 264).

Ireland (Walker, 1839a: p. 89 as *Entedon*. Mr Haliday; Graham, 1963: p. 264).

***Omphale isander* (Walker, 1839)**

DOWN: Donard Lodge, 20.ix.1958, AWS (Graham Collection as *Eugerium*) (BMNH) (unpublished); Holywood, near Belfast, AHH (Walker, 1839a: p. 326 as *Cirrospilus*);

Tollymore Park, 21.ix.1958, AWS (Graham Collection as *Eugerium*) (BMNH) (unpublished). Ireland (Irish ♂, det. MWRG, Haliday Collection (NMI) (unpublished); Bouček and Askew, 1968a: p. 136 as *Eugerium*. Britain including Ireland; Noyes, 1998: CD-ROM).

***Omphale lugens* (Nees, 1834)**

synonym *Omphale navius* (Walker, 1839)

Ireland (Two Irish specimens, det. MWRG as *Omphale navius*, Haliday Collection (NMI)).

New to Ireland.

***Omphale phaola* (Walker, 1839)**

DOWN: near Belfast, AHH (Walker, 1839a: p. 89 as *Entedon*).

Ireland (Graham, 1963: p. 265 5♀♀ syntypes, one selected as a lectotype (NMI); Bouček and Askew, 1968a: p. 134 Britain including Ireland; Noyes, 1998: CD-ROM).

***Omphale radialis* (Thomson, 1878)**

KERRY: Derrynane, ♀ 7.ix.1965, RRA (Askew Collection).

New to Ireland.

***Omphale salicis* (Haliday, 1833)**

KERRY: Derrynane, 2♀♀ 7.ix.1965, RRA (Askew Collection) (unpublished).

Ireland (Five Irish syntypes, det. MWRG, Haliday Collection (NMI) (unpublished); Bouček and Askew, 1968a: p. 135 Britain including Ireland; Hansson, 1996: p. 13 type localities: unknown, probably British or Irish; Noyes, 1998: CD-ROM).

***Pediobius alaspharus* (Walker, 1839)**

Ireland (Graham, 1963: p. 201 Mr Haliday).

***Pediobius epigonus* (Walker, 1839)**

CLARE: Ballyeighter Lough, emerged 21.v.1967 from *Cerodontha* sp. (Diptera: Agromyzidae) (det. GCDG) collected 3.ix.1966 on carnation sedge *Carex panicea* L., GCDG (NMI) (det. RRA); Mullagh More, emerged 6.v.1967 from *Cerodontha* (*Poemyza*) *pygmaea* (Meigen) (Diptera: Agromyzidae) (det. GCDG) collected 29.viii.1966 on false brome *Brachypodium sylvaticum* (Hudson) Beauv., GCDG (NMI) (det. RRA) (both unpublished); DUBLIN: North Bull Island, salt marsh, July 1960-1963, BH (NMI) (det. MWRG) (Healy, 1975: p. 237; Speight and Healy, 1977: p. 153); KERRY: Killarney, emerged 10.iv.1967 from *Chromatomyia* (*Phytomyza*) *scolopendri* (Robineau-Desvoidy) (Diptera: Agromyzidae) collected

6.ix.1966 on polypody *Polypodium vulgare* L., GCDG (NMI) (det. RRA) (unpublished).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 113 as *Entedon*. Mr Haliday).

***Pediobius eubius* (Walker, 1839)**

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Pediobius foliorum* (Geoffroy, 1785)**

synonym *Entedon argon* Walker, 1839

DOWN: Holywood, near Belfast, taken on the hazel *Corylus*, AHH (Walker, 1839a: p. 102 as *Entedon argon*).

Ireland (Irish specimen, det. MWRG as *Pediobius argon*, Haliday Collection (NMI) (unpublished)).

***Pediobius lysis* (Walker, 1839)**

Ireland (Four Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 115 as *Entedon*. Mr Haliday).

***Pediobius metallicus* (Nees, 1834)**

synonym *Entedon amyntas* Walker, 1839

synonym *Pediobius acantha* (Walker, 1839)

CLARE: Mullagh More, ♀ emerged 8.vi.1967 from *Cerodontha* (*Poemyza*) *pygmaea* (Diptera: Agromyzidae) (det. GCDG) collected 28.viii.1966 on false brome *Brachypodium sylvaticum*, GCDG (Askew Collection); KERRY: Killarney, ♂ emerged 23.iii.1967 from *Chromatomyia* (*Phytomyza*) *scolopendri* (Diptera: Agromyzidae) collected 6.ix.1966 on polypody *Polypodium vulgare*, GCDG (Askew Collection) (both unpublished).

Ireland (Four Irish specimens, det. MWRG as *Pediobius acantha*, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 112 as *Entedon amyntas*. Mr Haliday).

***Pediobius planiventris* (Thomson, 1878)**

DOWN: Newcastle, Tipperary Wood, ♂♂ ♀♀ end of June 1957, swept, MWRG (Graham, 1963: p. 201).

***Pediobius termerus* (Walker, 1839)**

Ireland (Irish co-type, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

EUDERINAE ERDOS, 1856

***Euderus albitarsis* (Zetterstedt, 1838)**

synonym *Entedon amphis* Walker, 1839

Ireland (Three Irish specimens, det. MWRG as *Euderus amphis*, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 106 as *Entedon amphis*. South and West of Ireland).

***Euderus viridis* Thomson, 1878**

DUBLIN: North Bull Island, salt marsh, September 1960-1963, BH (NMI) (det. MWRG) (Healy, 1975: p. 237; Speight and Healy, 1977: p. 153 as *Euderis*).

EULOPHINAE WESTWOOD, 1829

ELACHERTINI ASHMEAD, 1904

***Aulogymnus arsames* (Walker, 1838)**

DOWN: Holywood, 3 specimens, under oak *Quercus*, AHH (det. MWRG as *Olynx* (NMI)); WICKLOW: Deputy's Pass, 24.iv.1932, AWS (det. MWRG as *Olynx*) (NMI).

New to Ireland.

***Aulogymnus euedoreschus* (Walker, 1839)**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 190 as *Eulophus*); DUBLIN: Saggart, 28.iv.1943, AWS (det. MWRG as *Olynx*) (NMI) (unpublished).

***Aulogymnus gallarum* (Linnaeus, 1761)**

DUBLIN: Slade of Saggart, 2♀♀ 21.viii.1954, AWS (Askew, 1959: p. 53 as *Olynx*).

***Cirrospilus diallus* Walker, 1838**

KILDARE: Royal Canal, 13.x.1946, AWS (det. MWRG) (NMI).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Cirrospilus elegantissimus* Westwood, 1832**

Ireland (Walker, 1838b: p. 311 Mr Haliday).

***Cirrospilus lyncus* Walker, 1838**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1838b:

p. 382 Mr Haliday).

***Cirrospilus pictus* (Nees, 1834)**

synonym *Cirrospilus thasus* Walker, 1838

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1838b: p. 310 as *Cirrospilus thasus*. Mr Haliday; Noyes, 1998: CD-ROM as *Cirrospilus*).

***Cirrospilus singa* Walker, 1838**

Ireland (Four type specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1838b: p. 383 Mr Haliday).

***Cirrospilus vittatus* Walker, 1838**

Ireland (Walker, 1838b: p. 308 Mr Haliday; Graham, 1991c: p. 8 Irish paralectotype ♀ in the Haliday collection...and a green one (label) 'vittatus' (NMI) (There is another Irish specimen in the Haliday Collection (det. MWRG)).

***Colpoclypeus florus* (Walker, 1839)**

WICKLOW: no locality, AWS (Askew, 1968: p. 17).

***Elachertus inunctus* Nees, 1834**

synonym *Eulophus florianus* Walker, 1839

DOWN: Holywood, near Belfast, in August, on larches *Larix*, AHH (Walker, 1839a: p. 176 as *Eulophus florianus*); KERRY: Killarney, Tomies Wood, 15.ix.1981, JPOC (det. MWRG) (NMI) (unpublished).

(Noyes, 1998: CD-ROM gives it as *floridanus*)

***Elachertus isadas* (Walker, 1839)**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 169 as *Eulophus*).

Ireland (Askew, 1968: p. 11 Northern Ireland).

***Elachertus lateralis* (Spinola, 1808)**

synonym *Eulophus artaes* Walker, 1839

DUBLIN: Glenasmole, 18.viii.1943, AWS (det. MWRG as *Elachertus aetaeus*) (NMI) (unpublished).

Ireland (Irish specimen, det. MWRG as *Elachertus artaeus*, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 173 as *Eulophus*. Mr Haliday).

***Hyssopus nigritulus* (Zetterstedt, 1838)**

Ireland (Four Irish specimens, det. MWRG as *Elachertus*, Haliday Collection (NMI)).

New to Ireland.

***Stenomesius rufescens* (Retzius, 1783)**

synonym *Cirrospilus acesius* Walker, 1839

DUBLIN: Furry Glen, Phoenix Park, ♀ 8.v.1933 and 2♂♂ 20.viii.1936, by the stream, AWS (Stelfox, 1941: p. 338 authority given as Rossi); KILDARE: Oldtown House (Ho.), 10.viii.1952, AWS (NMI); Royal (R.) Canal, 11.vii.1943, AWS (NMI) (both det. MWRG) (unpublished).

Ireland (Irish syntype of *Cirrospilus acesius*, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839b: p. 200 as *Cirrospilus acesius*. Mr Haliday).

EULOPHINI ASHMEAD, 1904

***Dicladocerus euryalus* (Haliday, 1844)**

Ireland (Walker, 1848: p. 143 as *Eulophus euryalus*. From Mr Walker's collection; Graham, 1963: p. 182 lectotype ♀ (BMNH) with a green label which is written in Haliday's handwriting with "Eulophus Dicladoc euryalus"; Askew, 1968: p. 18 ?Ireland; Bouček and Askew, 1968a: p. 53 Britain...including Ireland; Askew and Godfray, 1987: p. 203 described from males only from Ireland; Noyes, 1998: CD-ROM).

***Diglyphus chabrias* (Walker, 1838)**

CLARE: Murrough, emerged 14.ix.1966 from *Phytomyza plantaginis* Robineau-Desvoidy (Diptera: Agromyzidae) (det. GCDG) on Buck's-horn plantain *Plantago coronopus* L. collected 31.viii.1966 (det. RRA) (Askew Collection; NMI).

New to Ireland.

***Diglyphus isaea* (Walker, 1838)**

CLARE: Poulnaclogh Bay, 5♀♀ emerged 21.ix. and 27.ix.1966 from *Chromatomyia* (*Phytomyza*) *asteris* (Hendel) (det. GCDG) collected 4.ix.1966 on sea aster *Aster tripolium* L., GCDG (Askew Collection; NMI) (det. RRA) (unpublished); DUBLIN: Mayfield, Rathgar, 2.x.1927, AWS (Graham Collection) (BMNH) (unpublished); North (N.) Bull (Island), 19.x.1951, AWS (NMI) (det. MWRG) (unpublished); North Bull Island, salt marsh, July 1960-

1963, BH (NMI) (det. MWRG) (Healy, 1975: p. 237; Speight and Healy, 1977: p. 153 as *Diglyphus isaca*); KERRY: Glencar, ♂ 11.ix.1965, RRA (Askew Collection); West Cove, ♂ 5.ix.1965, RRA (Askew Collection) (both unpublished); WEXFORD: Curracloe, sand-dunes, 12.vi.1982, JMOC (NMI); WICKLOW: Lough (L.) Nahanigan, 10.vii.1949, AWS (NMI); Russellstown Park, 16.viii.1981, JMOC (NMI) (all det. MWRG) (unpublished).

***Diglyphus poppoea* Walker, 1848**

Ireland (Walker, 1848: p. 145 From Mr Walker's collection; Bouček and Askew, 1968a: p. 71; Noyes, 1998: CD-ROM).

***Eulophus iapetus* Walker, 1839**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 145).

****Eulophus larvarum* (Linnaeus, 1758)**

CORK: Lodge Woods, Glengarriff, 23.vii.1935, AWS; WICKLOW: The Murrough, shore of Broad Lough, 21.viii.1938, AWS (mistakenly labelled Wx) (all det. MWRG) (NMI).

New to Ireland.

****Eulophus pennicornis* Nees, 1834**

DUBLIN: Dublin, January 1953, bred from noctuid (Lepidoptera) larva on *Chrysanthemum* in hot house, M. S. D. Westropp (det. MWRG) (NMI).

New to Ireland.

***Eulophus ramicornis* (Fabricius, 1781)** (Fig. 6)

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 126); KILDARE: Kilkea Park, ♂ ♀ emerged 25.v.1939 from unknown lepidopteran larva, 2 of brood of 22, collected on 4.viii.1938 by Rev. H. N. Dunlop, AWS (BMNH) (unpublished); WICKLOW: Athdown, 13.viii.1954, MWRG (Graham Collection) (BMNH); Glen of the Downs, 23.viii.1954, MWRG, Graham Collection (BMNH) (both unpublished).

***Eulophus thespius* Walker, 1839**

DUBLIN: no locality, MWRG (Askew, 1968: p. 23); WICKLOW: Glen of the Downs, 23.viii.1954, MWRG (Graham Collection) (BMNH) (unpublished); no locality, MWRG (Askew, 1968: p. 23).

***Eulophus westwoodii* Westwood, 1829**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 158).

***Hemiptarsenus fulvicollis* Westwood, 1833**

synonym *Eulophus anementus* Walker, 1839

synonym *Eulophus dercynus* Walker, 1839

DOWN: Holywood, near Belfast, on willows *Salix*, AHH (Walker, 1839a: p. 140 as *Eulophus dercynus*); Holywood, near Belfast, AHH (Walker, 1839a: p. 191 as *Eulophus*; Walker, 1839a: p.192 as *Eulophus anementus*); DUBLIN: Little Bray, 23.x.1932, in field behind the old railway, EOM (Stelfox, 1941: p. 338); Lynch Park (Pk), 22.viii.1951, AWS (NMI) (unpublished); KERRY: Coral Strand near Sneem, ♀ 2.ix.1965, RRA (Askew Collection) (unpublished); near Roughty Bridge, Kenmare, 28.vi.1935, AWS (Stelfox, 1941: p. 338); West Cove, ♀ 5.ix.1965, RRA (Askew Collection) (unpublished); KILDARE: Royal Canal, 12.vii.1944, AWS (Graham Collection) (BMNH); TIPPERARY (South): Carrigeenina, 9.ix.1943, AWS (NMI); WICKLOW: Athdown, 30.viii.1944, AWS (Graham Collection) (BMNH) (all det. MWRG) (unpublished).

***Hemiptarsenus ornatus* (Nees, 1834)**

synonym *Eulophus dropion* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 150 as *Eulophus dropion*); DUBLIN: Bull Island, 19.x.1951, AWS (Graham Collection) (BMNH); Lucan, 20.viii.1954, AWS (Graham Collection) (BMNH); GALWAY: Funshin More, Burren, ♂ from *Stigmella aurella* (Fabr.) (Lepidoptera: Nepticulidae) group collected 25.vii.1974 on stone bramble *Rubus saxatilis* L., A. M. Emmet (Askew Collection); KERRY (South): Roughty Bridge (Br.), 28.vi.1935, AWS (NMI); KILDARE: Royal (R.) Canal, 12.vii.1944, AWS (NMI); same locality, 15.viii.1943 and 8.ix.1946, AWS (Graham Collection) (BMNH); LAOIS (Queen's County) (QC): Wheelahan's Bridge (Br.), 13.viii.1950, AWS (NMI); SLIGO: Trawalua, 20.x.1937, AWS (Graham Collection) (BMNH); WEXFORD: Carnsore, 19.vii.1937, AWS (Graham Collection) (BMNH); WICKLOW: The Murrough, 7.v.1950, AWS (Graham Collection) (BMNH) (all det. MWRG as *Hemiptarsenus dropion*) (all unpublished).

***Hemiptarsenus unguicellus* (Zetterstedt, 1838)**

synonym *Eulophus alce* Walker, 1840

synonym *Eulophus drusilla* Walker, 1839

synonym *Eulophus hegemon* Walker, 1839

synonym *Eulophus myodes* Walker, 1839

synonym *Eulophus nycteus* Walker, 1839

DOWN: Holywood, near Belfast, in August, on a willow *Salix*, AHH (Walker, 1839a: p. 128 as *Eulophus nycteus*); Holywood, near Belfast, AHH (Walker, 1839a: p. 150 as *Eulophus hegemon*; Walker, 1839a: p. 156 as *Eulophus drusilla*); DUBLIN: Glenasmole, 30.viii.1935 and 16.vii.1941, AWS (NMI) (det. MWRG) (unpublished); North Bull Island, salt marsh, July 1960-1963, BH (NMI) (det. MWRG) (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153); Phoenix Park (Pk), 3.xi.1943, AWS (NMI) (det. MWRG) (unpublished); GALWAY: Clifden, July 1839, AHH (Walker, 1840: p. 234 as *Eulophus alce*); KERRY: Derrynane, 2♀♀ 7.ix.1965, RRA (Askew Collection); Glencar, ♂ 11.ix.1965, RRA (Askew Collection); Killarney, Ross Castle, 16.ix.1981, JPOC (NMI) (det. MWRG); West Cove, ♀ 5.ix.1965, RRA (Askew Collection) (all unpublished); KILDARE: Carton, 30.vii.1950, AWS (Graham Collection) (BMNH); Landenstown (Landenst'n), 25.ix.1949, AWS (NMI) (det. MWRG); same locality, 15.viii.1954, MWRG (Graham Collection) (BMNH) (all unpublished).

Ireland (Walker, 1839a: p. 137 as *Eulophus myodes*).

***Necremnus artynes* (Walker, 1839)**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 164 as *Eulophus*); DUBLIN: Rogerstown, 8.vii.1943, AWS (Graham Collection) (BMNH) (unpublished); KERRY: Derrynane, ♀ 7.ix.1965, sand-dunes, RRA (Askew Collection) (unpublished).

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Necremnus cosconius* (Walker, 1839)**

DUBLIN: west of Kilmashogue, 6.xii.1933, AWS (det. MWRG) (NMI) (unpublished); KERRY: Bolus Point, ♀ 8.ix.1965, RRA (Askew Collection) (unpublished).

Ireland (Walker, 1839a: p. 145 as *Eulophus*. Mr Haliday).

[***Necremnus croton* (Walker, 1839)**

DOWN: no locality, ♀ 31.vii.1957, AWS (unpublished details supplied by RRA) (Askew, 1968: p. 25 probably this species).]

***Necremnus folia* (Walker, 1839)**

synonym *Eulophus diyllus* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 185 as *Eulophus diyllus*).

Ireland (Walker, 1839a: p. 147 as *Eulophus*. Mr Haliday).

***Necremnus leucarthros* (Nees, 1834)**

DUBLIN: The Slade of Saggart, 12.viii.1936, AWS (det. MWRG) (NMI); WICKLOW: Glen of the Downs, 23.viii.1954, MWRG (Graham Collection) (BMNH).

New to Ireland.

***Necremnus metalarus* (Walker, 1839)**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 188 as *Eulophus*); Newcastle, 1.vi.1957 and 19.vi.1957, MWRG (Graham Collection) (BMNH); TIPPERARY (South): Lough Curra, 23.v.1944, AWS (Graham Collection) (BMNH) (both unpublished).

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI) (unpublished); Askew, 1968: p. 25 Northern Ireland).

***Necremnus tidius* (Walker, 1839)**

DOWN: Tullybrannigan, 6.xii.1956, AWS (Graham Collection) (BMNH); same locality, 10.x.1957, in house, AWS (det. MWRG) (NMI); KILDARE: Royal Canal, 12.iv.1952, AWS (Graham Collection) (BMNH).

New to Ireland.

***Pnigalio longulus* (Zetterstedt, 1838)**

synonym *Eulophus pisidice* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 158 as *Eulophus pisidice*); WICKLOW: Lough (L.) Nahanigan, 10.vii.1949, AWS (det. MWRG) (NMI) (unpublished).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Pnigalio pecticornis* (Linnaeus, 1758)**

synonym *Eulophus faustitas* Walker, 1839

synonym *Eulophus mania* Walker, 1839

synonym *Eulophus menyllus* Walker, 1839

DOWN: Holywood, near Belfast, on larches *Larix*, AHH (Walker, 1839a: p. 131 as *Eulophus menyllus*); Holywood, near Belfast, AHH (Walker, 1839a: p. 154 as *Eulophus mania*; Walker, 1839a: p. 167 as *Eulophus faustitas*); LAOIS (QC): near Emo Park (Pk), 17.vii.1932, AWS (NMI); WICKLOW: Ballinacor, 26.x.1942, AWS (NMI); Clara, 13.v.1934, AWS (all det. MWRG) (NMI) (unpublished).

***Pnigalio soemius* (Walker, 1839)**

GALWAY: Ballinahinch, ♀ emerged 17.viii.1974 from *Nepticula salicis* Stainton (Lepidoptera: Nepticulidae) collected 28.vii.1974 on eared willow *Salix aurita* L., A. M. Emmet (Askew Collection); KERRY: Kenmare, ♀ emerged 21.vi.1961 from *Kessleria saxifragae* (Stainton) (Lepidoptera: Yponomeutidae) collected on 27.v.1961, E. C. Pelham-Clinton (Askew Collection).

New to Ireland.

***Sympiesis sericeicornis* (Nees, 1834)**

synonym *Eulophus eneugamus* Walker, 1839

DOWN: Holywood, near Belfast, parasitic on a subcutaneous larva of beech-leaves *Fagus*, AHH (Walker, 1839a: p. 162 as *Eulophus eneugamus*); DUBLIN: St Anne's, Clontarf, 17.v.1925, EOM (NMI); WICKLOW: Baltyboys, 4.v.1949. AWS (both det. MWRG) (NMI) (unpublished).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Noyes, 1998: CD-ROM as *Sympiesis eneugamus*).

TETRASTICHINAE FORSTER, 1856

***Aprostocetus agrus* (Walker, 1839)**

Ireland (Graham, 1987a: p. 224; Noyes, 1998: CD-ROM).

***Aprostocetus anodaphus* (Walker, 1839)**

DOWN: near Belfast, on the coast, in August, AHH (Walker, 1839a: p. 322 as *Cirrospilus*; Graham, 1961a: p. 53 lectotype ♀ labelled 'Coast Aug.'[ust] in Haliday's handwriting (BMNH)).

Ireland (Graham, 1987a: pp 244-245 lectotype ♀, near Belfast (BMNH); Noyes, 1998: CD-ROM).

***Aprostocetus aristaeus* (Walker, 1839)**

Ireland (Graham, 1987a: p. 263; Noyes, 1998: CD-ROM).

***Aprostocetus brachycerus* (Thomson, 1878)**

Ireland (Graham, 1987a: p. 348; Noyes, 1998: CD-ROM).

***Aprostocetus calamarius* Graham, 1961**

WICKLOW: Killoughter, ♀ (paratype) 3.ix.1933, AWS (Graham, 1961e: p. 36).

Ireland (Graham, 1987a: p. 357; Noyes, 1998: CD-ROM).

***Aprostocetus catius* (Walker, 1839)**

Ireland (Graham, 1987a: p. 343; Noyes, 1998: CD-ROM).

***Aprostocetus caudatus* Westwood, 1833**

synonym *Cirrospilus mutilia* Walker, 1839

synonym *Cirrospilus trabea* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 323 as *Cirrospilus mutilia* and *Cirrospilus trabea*; Graham, 1961a: pp 52-53).

Ireland (Irish ♂ labelled *Cirrospilus mutilia*, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 325 as *Cirrospilus*. May to July; on grass beneath firs. Mr Haliday; Graham, 1987a: p. 238; Noyes, 1998: CD-ROM).

***Aprostocetus celtidis* (Erdös, 1954)**

DUBLIN: Lucan, ♀ 20.viii.1954, MWRG; SLIGO: Lough Gill, shore at Doonee Rock, ♀ 11.vi.1959, AWS (Graham, 1973a: p. 365 as *Tetrastichus*).

Ireland (Graham, 1987a: p. 123; Noyes, 1998: CD-ROM).

***Aprostocetus citrinus* (Förster, 1841)**

Ireland (Graham, 1987a: p. 313; Noyes, 1998: CD-ROM).

***Aprostocetus clavicornis* (Zetterstedt, 1838)**

synonym *Cirrospilus euedochus* Walker, 1839

synonym *Cirrospilus lamius* Walker, 1839

DOWN: Holywood, near Belfast, on the hazel *Corylus*, AHH (Walker, 1839a: p. 327 as *Cirrospilus lamius*); same locality, on the hazel *Corylus*, AHH (Walker, 1839b: p. 205 as *Cirrospilus euedochus*).

Ireland (Eight Irish type specimens, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Aprostocetus constrictus* Graham, 1987**

DUBLIN: Harold's Cross, 14 Clareville Road, 3♀♀ (paratypes) 29.viii.1955, AWS (BMNH) (Graham, 1987a: p. 305).

Ireland (Noyes, 1998: CD-ROM).

***Aprostocetus crino* (Walker, 1838)**

Ireland (Graham, 1987a: p. 110; Noyes, 1998: CD-ROM).

***Aprostocetus emesa* (Walker, 1839)**

Ireland (Graham, 1987a: p. 342; Noyes, 1998: CD-ROM).

***Aprostocetus epicharmus* (Walker, 1839)**

Ireland (Graham, 1987a: p. 223; Noyes, 1998: CD-ROM).

***Aprostocetus gaus* (Walker, 1839)**

WICKLOW: Deputy's Pass, 4.ix.1932, AWS (NMI) (det. MWRG).

Ireland (Graham, 1987a: p. 338; Noyes, 1998: CD-ROM).

***Aprostocetus gratus* (Giraud, 1863)**

Ireland (Graham, 1987a: p. 284; Noyes, 1998: CD-ROM).

***Aprostocetus leucone* (Walker, 1839)**

Ireland (Walker, 1839a: p. 325 as *Cirrospilus*. Mr Haliday; Graham, 1987a: p. 240; Noyes, 1998: CD-ROM).

***Aprostocetus longulus* (Erdös, 1954)**

TIPPERARY (South): Ballinacourty, ♀ 11.vi.1944, at edge of pond, AWS (BMNH) (Graham, 1987a: p. 102).

Ireland (Noyes, 1998: CD-ROM).

***Aprostocetus mycerinus* (Walker, 1839)**

Ireland (Graham, 1987a: p. 104; Noyes, 1998: CD-ROM).

***Aprostocetus orithyia* (Walker, 1839)**

synonym *Aprostocetus arundinis* (Giraud, 1863)

DOWN: near Belfast, AHH (Walker, 1839a: p. 352 as *Cirrospilus*).

Ireland (Irish specimen, det. MWRG as *Aprostocetus arundinis*, Haliday Collection (NMI) (unpublished); Graham, 1987a: p. 281; Noyes, 1998: CD-ROM).

***Aprostocetus pallipes* (Dalman, 1820)**

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Aprostocetus pausiris* (Walker, 1839)**

Ireland (Graham, 1987a: p. 265; Noyes, 1998: CD-ROM).

***Aprostocetus pygmaeus* (Zetterstedt, 1838)**

synonym *Cirrospilus xixuthrus* Walker, 1839

synonym *Tetrastichus conon* (Walker, 1839)

DUBLIN: North Bull Island, salt marsh, June-July 1960-1963, BH (det. MWRG) (NMI) (Healy, 1975: p. 237 as *Aprostoletus canon*; Speight and Healy, 1977: p. 153 as *Tetrastichus conon*); TIPPERARY: near Ballina, 27.v.1984, in a small wood beside a small river, JPOC (det. MWRG as *Tetrastichus conon*) (NMI) (unpublished).

Ireland (Walker, 1839a: p. 307 as *Cirrospilus xixuthrus*. Mr Haliday; Graham, 1961a: p. 60 as *Cirrospilus xixuthrus*. I cannot find any material in Haliday's collection; Graham, 1987a: p. 340; Noyes, 1998: CD-ROM).

***Aprostocetus subanellatus* Graham, 1961**

ANTRIM: Lough Neagh at Selshan, shore, several ♂♂ and ♀♀ (paratypes, holotype) 26.vi.1957, swept from grasses in a marshy area, MWRG and Nora Graham (OUM and BMNH) (Graham, 1961f: p. 294; 1987a: p. 336).

Ireland (Graham, 1987: p. 337; Noyes, 1998: CD-ROM).

***Aprostocetus suevius* (Walker, 1839)**

Ireland (Graham, 1987: p. 122; Noyes, 1998: CD-ROM).

***Aprostocetus terebrans* Erdös, 1954**

DOWN: Newcastle, Donard Lodge Woods, ♂ ♀♀ 28.vi.1957, swept from grasses, MWRG (Graham, 1973a: p. 366 as *Tetrastichus*).

Ireland (Graham, 1961a: p. 54 have taken specimens; Graham, 1987a: p. 239; Noyes, 1998: CD-ROM).

***Aprostocetus tymber* (Walker, 1839)**

Ireland (Graham, 1987a: p. 314; Noyes, 1998: CD-ROM).

***Aprostocetus zoilus* (Walker, 1839)**

Ireland (Graham, 1987a: p. 341; Noyes, 1998: CD-ROM).

***Aprostocetus zosimus* (Walker, 1839)**

synonym *Cirrospilus athyrte* Walker, 1839

synonym *Cirrospilus bunus* Walker, 1839

synonym *Aprostocetus charoba* (Walker, 1840)

DOWN: near Belfast, on willows *Salix*, AHH (Walker, 1839a: p. 178 as *Cirrospilus*); KERRY: Galway's Bridge, Killarney, 9.ix.1981, JPOC (det. MWRG as *Aprostocetus charoba*) (NMI) (unpublished).

Ireland (Three Irish specimens, det. MWRG as *Aprostocetus charoba*, Haliday Collection (NMI) (unpublished); Walker, 1839a: p. 179 as *Cirrospilus bunus*. Mr Haliday; Noyes, 1998: CD-ROM).

***Baryscapus endemus* (Walker, 1839)**

Ireland (Graham, 1991b: p. 125; Noyes, 1998: CD-ROM).

***Baryscapus galactopus* (Ratzeburg, 1844)**

DUBLIN: Natural History Museum (Upper Merrion Street), 16.viii.1924, on window, ? from refuse of *Formica rufa* L. (Hymenoptera: Formicidae) from the Devil's Glen, Co. Wicklow, EOM (NMI) (det. MWRG as *Tetrastichus*).

Ireland (Graham, 1991b: p. 132; Noyes, 1998: CD-ROM).

***Holcotetrastichus rhosaces* (Walker, 1839)**

Ireland (Walker, 1839a: p. 293 as *Cirrospilus*. Reared by Mr Haliday from the larva of a *Cassida* (Coleoptera: Chrysomelidae); Graham, 1991b: p. 274; Noyes, 1998: CD-ROM).

***Minotetrastichus frontalis* (Nees, 1834)**

synonym *Minotetrastichus ecus* (Walker, 1839)

Ireland (Graham, 1987a: p. 54 as *Minotetrastichus eeus*; Noyes, 1998: CD-ROM as *Minotetrastichus ecus*).

***Oomyzus incertus* (Ratzeburg, 1844)**

synonym *Aprostocetus matranus* (Erdös, 1954)

DOWN: Newcastle, some specimens swept from sand-dunes, June 1957, MWRG and Nora Graham (Graham, 1961a: p. 41 as *Aprostocetus matranus*).

Ireland (Graham, 1991b: p. 199; Noyes, 1998: CD-ROM).

***Quadrastichus centor* (Graham, 1961)**

DOWN: Newcastle, ♂ 4♀♀ 19.vi.1957, 2♀♀ 26.iv.1957 and 2♀♀ 29.vi.1957, MWRG (BMNH) (Graham, 1991b: p. 63).

Ireland (Noyes, 1998: CD-ROM).

***Quadrastichus lasiocerus* (Graham, 1961)**

WICKLOW: The Murrough, ♀ (paratype) 20.viii.1955, AWS (Graham, 1961e: p. 14 as *Aprostocetus*).

Ireland (Graham, 1991b: p. 64; Noyes, 1998: CD-ROM).

***Quadrastichus pedicellaris* (Thomson, 1878)**

Ireland (Graham, 1991b: p. 68; Noyes, 1998: CD-ROM).

******Quadrastichus praecox* (Graham, 1961)**

DOWN: Newcastle, 22.vi.1957, MWRG (Graham Collection) (BMNH).

New to Ireland.

***Quadrastichus pteridis* Graham, 1991**

DOWN: Newcastle, on sand dunes near Murlough House, ♂ 5♀♀ (paratypes) 19.vi.1957, 14♀♀ (holotype, paratypes) 29.vi.1957 and 2♀♀ (paratypes) 28.vi.1957, amongst bracken *Pteridium aquilinum* (L.) Kuhn, MWRG (BMNH, OUM) (Graham, 1991b: p. 60).

Ireland (Noyes, 1998: CD-ROM).

***Quadrastichus thysanotus* (Förster, 1861)**

synonym *Aprostocetus pumilio* Graham, 1961

ROSCOMMON: Doyle's [Boyle's] Bridge, 1.5 miles south-west of Athlone, 2♀♀ (paratypes) 8.viii.1955, AWS (Graham, 1961e: p. 18 as *Aprostocetus pumilio*).

Ireland (Graham, 1991b: p. 70; Noyes, 1998: CD-ROM).

***Quadrastichus vacuna* (Walker, 1839)**

SLIGO: Bunduff, 1.viii.1933, AWS (NMI) (det. MWRG as *Tetrastichus*).

Ireland (Graham, 1991b: p. 59; Noyes, 1998: CD-ROM).

***Quadrastichus ventricosus* (Graham, 1961)**

KILDARE: Skerries Bog, ♀ (paratype) 23.ix.1948, amongst birch *Betula* and willow *Salix* scrub, AWS (Graham, 1961b: p. 32 as *Aprostocetus*).

***Sigmophora brevicornis* (Panzer, 1804)**

synonym *Cirrospilus armaeus* Walker, 1839

DOWN: near and at Tollymore (Tullymore) Park, on oaks *Quercus*, AHH and MWRG (Walker, 1839b: p. 201 as *Cirrospilus armaeus*. Mr Haliday; Graham, 1961a: p. 45 as *Aprostocetus*); Tullybrannigan, 6.ix.1960, AWS (NMI) (det. MWRG as *Tetrastichus*)

(unpublished).

Ireland (Four Irish specimens, det. MWRG as *Aprostocetus*, Haliday Collection (NMI) (unpublished); Graham, 1987a: p. 79; Noyes, 1998: CD-ROM).

***Tamarixia actis* (Walker, 1839)**

Ireland (Graham, 1991b: p. 288; Noyes, 1998: CD-ROM).

***Tamarixia leptothrix* Graham, 1991**

DONEGAL: Maherabeg, ♀ (paratype) 17.ix.1958, on grey willow *Salix cinerea*, MWRG (OUM) (Graham, 1991b: p. 291).

Ireland (Noyes, 1998: CD-ROM).

***Tamarixia pubescens* (Nees, 1834)**

Ireland (Irish specimen, det. MWRG as *Aprostocetus*, Haliday Collection (NMI)).

New to Ireland.

***Tetrastichus coelarchus* Graham, 1991**

WICKLOW: Athdown, 2♀♀ (paratypes) 13.viii.1954, MWRG (BMNH) (Graham, 1991b: p. 241).

Ireland (Noyes, 1998: CD-ROM).

***Tetrastichus halidayi* (Graham, 1961)**

ANTRIM: Carnlough, 29.vii.1931, AWS (Graham Collection) (BMNH) (unpublished); WICKLOW: [Beasdale, ♀ (paratype) 11.vii.1939, AWS. This site is mistakenly given as in Wicklow. According to the Stelfox diaries, Beasdale is in West Inverness, Scotland]; The Glen of the Downs, ♂ (paratype) 23.viii.1954, MWRG (all Graham, 1961e: p. 8 as *Aprostocetus*).

Ireland (Graham, 1961e: p. 8 as *Aprostocetus*. Unlocalized, two females (the first the Type) in the old Hope-Westwood collection, Oxford. The two females in the Hope-Westwood collection referred to above are Haliday specimens as shown by the style of mounting and the shape of the cards upon which they are gummed; each bears a green ticket which was one of Haliday's methods of indicating Irish origin and upon one of these tickets the name >>aeneus>> is written in his handwriting. The underside of each card also bears a note in Haliday's handwriting, on that carrying the first specimen >>Rubus 31 July>>, on the second >>Rubus July e>>[xeunte]. Walker (1848, List specimens Hym. Ins. Brit. Mus. Part 2 - Chalcidites: 146) cites the name >>Tetrastichus aeneus, Haliday, MSS, Ann. Nat. Hist.

1848, a, Ireland. From Mr. Walker's collection. > > However, the name does not appear to have been validated by any published description. The British Museum (Nat. Hist.) collection contains two other Haliday specimens labelled by him as *aeneus* and indicated as Irish; these, however, belong to a different species from those in the Hope-Westwood collection. In view of the doubt as to Haliday's original concept of *aeneus*. I have not used this name for the species described above as new; Gerard, 1985: p. 234 Irish Republic, in late July and August; Graham, 1991b: p. 232; Noyes, 1998: CD-ROM).

***Tetrastichus ilithyia* (Walker, 1839)**

Ireland (Graham, 1991b: p. 235; Noyes, 1998: CD-ROM).

***Tetrastichus miser* (Nees, 1834)**

synonym *Cirrospilus attalus* Walker, 1839

KILDARE: Royal Canal, 22.viii.1954, MWRG (Graham Collection) (BMNH) (unpublished).

Ireland (Irish specimen, det. MWRG as *Aprostocetus*, Haliday Collection (NMI) (unpublished); Walker, 1839b: p. 353 as *Cirrospilus attalus*. Mr Haliday; Graham, 1991b: p. 259; Noyes, 1998: CD-ROM).

***Tetrastichus sinope* (Walker, 1839)**

Ireland (Graham, 1991b: p. 260; Noyes, 1998: CD-ROM).

NOTE

The following species name occurs in the literature but it is a nomen nudum and has no scientific validity. It is merely reported here to avoid any possible confusion.

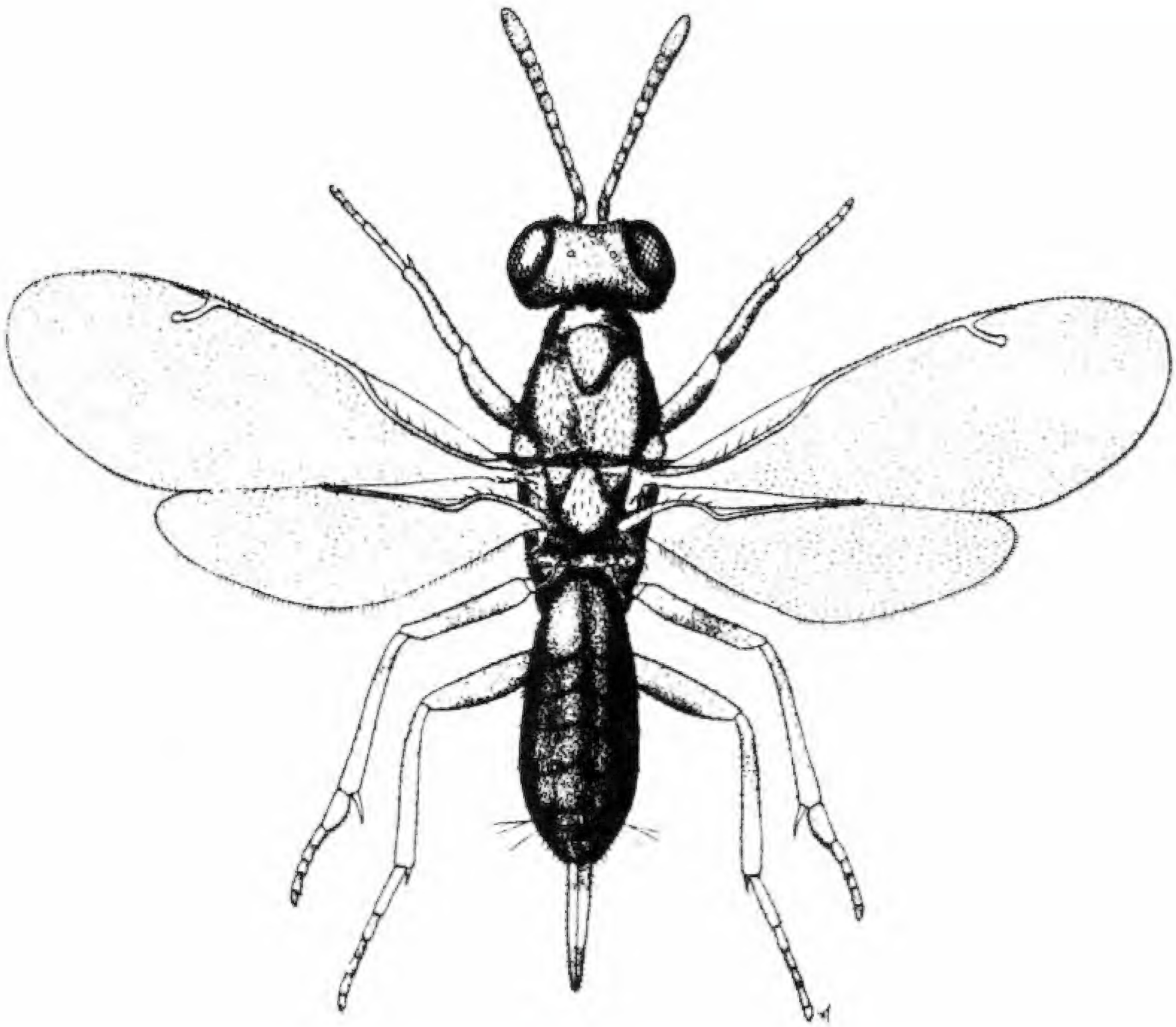
Tetrastichus aeneus Haliday in Walker, 1848

Ireland (Walker, 1848: p. 146 From Mr Walker's collection).

EUPELMIDAE WALKER, 1833

Small to moderately large insects (about 1.3-7.5mm in length) (Fig. 7). They are robust to extremely elongate, usually highly metallic, but sometimes yellow or orange. Most are parasitic and facultatively hyperparasitic on the immature stages of Coleoptera, Hemiptera: Homoptera, Hymenoptera, Lepidoptera, Neuroptera and Orthoptera. World-wide, there are some 750 described species but only 14 are known from Great Britain. To-date, three species have recorded from Ireland.

FIGURE 7: *Eupelmus urozonus* Dalman.



CALOSOTINAE BOUČEK, 1958

***Calosota aestivalis* Curtis, 1836**

synonym *Calosoter vernalis* Walker, 1837

DOWN: Holywood, AHH (Walker, 1837: p. 359 as *Calosoter vernalis*).

EUPELMINAE WALKER, 1833

***Eupelmus urozonus* Dalman, 1820** (Fig. 7)

KERRY (South): Caragh Lake, on O'Donoghue's Island, 2♀♀ 6.vii.1934, captured on a bored stump, AWS (Stelfox, 1941: p. 337; O'Connor and Nash, 1997: p. 129).

***Macroneura vesicularis* (Retzius, 1783)**

synonym *Macroneura maculipes* Walker, 1837

synonym *Eupelmus degeeri* Dalman, 1820

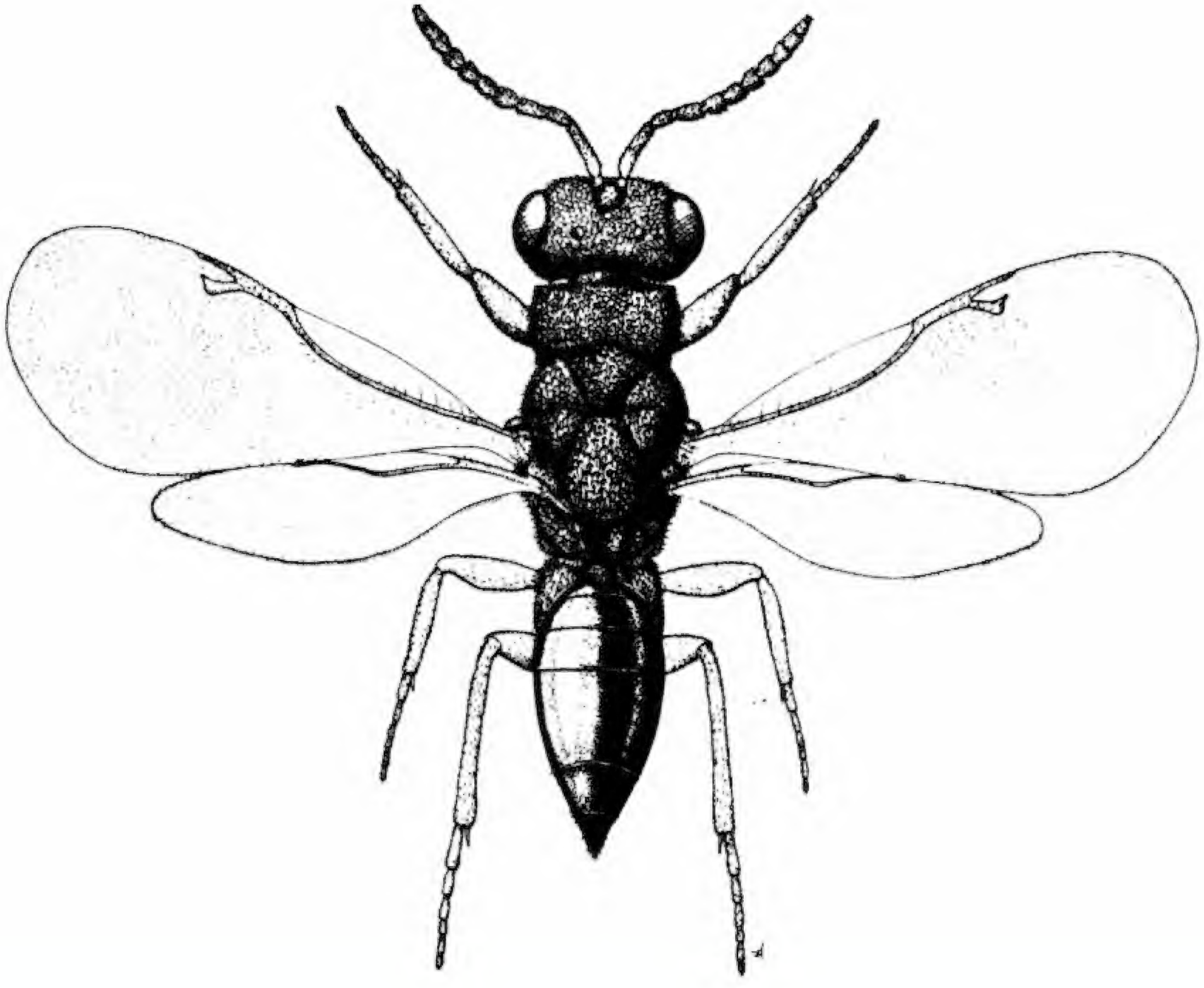
DUBLIN: Portmarnock (Port Marnock), AHH (NMI) (Walker, 1837: p. 354 as *Macroneura maculipes*); same locality, on sand-hills, AHH (Walker, 1837: p. 362 as *Eupelmus degeeri*); Portrane Burrows, around the point of the sand-dunes, 11.vi.1941, AWS (NMI) (O'Connor and Nash, p. 129); WEXFORD: Ballyteige, ♀, emerged from a gall of *Diplolepis spinosissimae* (Giraud) (Hymenoptera: Cynipidae) collected from a burnet rose *Rosa pimpinellifolia* L. on the sand-dunes, JPOC (NMI) (unpublished); Curracloe, 19.vii.1937, on sand-hills, AWS (NMI) (O'Connor and Nash, p. 129); WICKLOW: Buckroney, 14.viii.1946, on sand-dunes, AWS (O'Connor and Nash, p. 129).

Ireland (Noyes, 1998: CD-ROM as *Eupelmus maculipes*).

EURYTOMIDAE WALKER, 1832

Very small to small insects (*circa* 1.4-6mm in length) (Fig. 8). The body is robust, elongate and often strongly sculptured. The colour is normally black and at most, only very slightly metallic. Most are endophytic, either as phytophages or as parasitoids of phytophagous insects. World-wide, there are some 1,100 species, with 91 known from Great Britain. To-date, only 17 species have been recorded from Ireland.

FIGURE 8: ***Eurytoma mayri*** **Ashmead.**



EURYTOMINAE WALKER, 1832

***Bruchophagus platypterus* (Walker, 1834)**

Ireland (Walker, 1846a: p. 8 as *Eurytoma*. Presented by A. H. Haliday).

***Eurytoma brunniventris* Ratzeburg, 1852**

DERRY: Somerset Forest near Coleraine, ♂ ♀ 17.ix.1980, bred from galls of *Cynips longiventris* Hartig (Hymenoptera: Cynipidae) collected on 15.ix.1980, RN (Nash, 1996: p. 268).

***Eurytoma compressa* (Fabricius, 1794)**

synonym *Eurytoma tibialis* Boheman, 1836

DUBLIN: North Bull Island, salt marsh, July 1960-1963, BH (det. MWRG) (Healy, 1975: p. 236 as *Eurytoma tibialis*; Speight and Healy, 1977: p. 153 as *Eurytoma tibialis*).

***Eurytoma hypochoeridis* Claridge, 1960**

WATERFORD: Tramore, ♂♂ ♀♀ 15-22.vi.1999 emerged from galls of *Phanacis hypochoeridis* (Kieffer) (Hymenoptera: Cynipidae) in cat's ear *Hypochoeris radicata* L. collected 9.iv.1999 on the sand-dunes of the back strand, JPOC (NMI) (O'Connor, in press, b).

***Eurytoma rosae* Nees, 1834**

WEXFORD: Ballyteige, ♂ 3♀♀ emerged 1-3.vi.1997 from galls of *Diplolepis spinosissimae* (Giraud) (Hymenoptera: Cynipidae) on burnet rose *Rosa pimpinellifolia* L. collected 23.viii.1996 on the sand-dunes, JPOC (NMI) (O'Connor, in press, b).

****Eurytoma rufipes* Walker, 1832**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Sycophila biguttata* (Swederus, 1795)**

synonym ?*Decatoma flavicornis* Walker, 1834

WICKLOW: Laragh (Lara), oak *Quercus* woods, June, AHH (Walker, 1836: p. 25 as *Decatoma flavicornis*).

***Sycophila concinna* (Boheman, 1836)**

synonym *Decatoma mesomelas* Walker, 1836

WICKLOW: Laragh (Lara), oak *Quercus* woods, June, AHH (♀ *fide* MWRG, Haliday Collection (NMI)) (unpublished); Walker, 1836: p. 24 as *Decatoma mesomelas*).

[***Systole tuonela* Claridge, 1959**

DUBLIN: Portrane, 11.viii.1954, on dunes, MWRG (Claridge, 1959: p. 42 I have seen a series of specimens...which may belong to this species. However, they are rather large and differ slightly in the shape of the face. I am inclined to believe that they may represent a further species.]

***Tetramesa angustatum* (Walker, 1832)**

SLIGO: Toberscanavan, 19.viii.1933, AWS (NMI); WICKLOW: Ballyhubbock (B'hubbock), 14.v.1937, AWS (NMI) (both det. MWRG).

New to Ireland.

***Tetramesa angustipenne* (Walker, 1832)**

DUBLIN: Bull Island, 25.iv.1982, JMOC (NMI) (det. MWRG).

New to Ireland.

***Tetramesa brevicollis* (Walker, 1836)**

DUBLIN: Bull Island, 9.v.1982, alder *Alnus* marsh, JMOC (NMI) (det. MWRG) (unpublished); Portmarnock (Port Marnock), found on sand-hills, AHH (Three Irish specimens *fide* MWRG, Haliday Collection (NMI) (unpublished); Walker, 1836: p. 24 as *Isosoma brevicolle*).

***Tetramesa fulvicollis* (Walker, 1832)**

DUBLIN: Clondalkin (C'l'd'k'n), 14.v.1944, AWS (NMI); KILDARE: Royal (R.) Canal, 11.vii.1943, AWS (NMI) (both det. MWRG).

New to Ireland.

***Tetramesa hyalipennis* (Walker, 1832)**

DUBLIN: Portrane, 22.vii.1923, AWS (NMI) (det. MWRG).

New to Ireland.

***Tetramesa linearis* (Walker, 1832)**

DUBLIN: North Bull Island, salt marsh, July 1960-1963, BH (NMI) (det. MWRG) (Healy, 1975: p. 237; Speight and Healy, 1977: p. 153 as *Harmolita lineare*).

***Tetramesa longicornis* (Walker, 1832)**

MEATH: Lagore, 18.vi.1929, AWS (NMI) (det. MWRG).

New to Ireland.

***Tetramesa longula* (Dalman, 1820)**

Ireland (Irish specimen (♀), det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Tetramesa petiolata* (Walker, 1832)**

MAYO: Clare Island, ♂ July 1910, CM (Morley, 1911: p. 17 as *Isosoma*).

MYMARIDAE HALIDAY, 1833

Minute to small insects (0.35-1.8mm in length) (Fig. 9). They are never metallic in colour but instead, normally, vary from yellow to dark brown with paler or darker markings. Most are internal and solitary parasitoids of the eggs of other insects. World-wide, there are some 1,300 described species with 87 recorded from Great Britain. To-date, only 21 species have been recorded in Ireland.

***Alaptus fusculus* Walker, 1846**

synonym *Alaptus foersteri* Soyka, 1939

Ireland (Soyka, 1939: p. 19 as *Alaptus foersteri*. ♀ cotype from Foerstercher Collection, collected by Mayer in Ireland, without any locality or date (aus der Foerstercher Sammlung Coll. Mayer aus Irland, ohne sonstigen Stand-ort und Datum); Hincks, 1959: p. 144).

***Anagrus atomus* (Linnaeus, 1767)**

KILDARE: Rye Water, ♀ 19.x.1947, AWS (NMI) (det. WDH).

New to Ireland.

***Anaphes (Anaphes) fuscipennis* Haliday, 1833**

Ireland (Walker, 1846b: p. 51 common; Kryger, 1950: p. 9).

***Anaphes (Patasson) crassicornis* Walker, 1846**

TIPPERARY (South): Galtymore, 3,000 ft, ♀ 29.v.1944, AWS (NMI) (det. WDH).

New to Ireland.

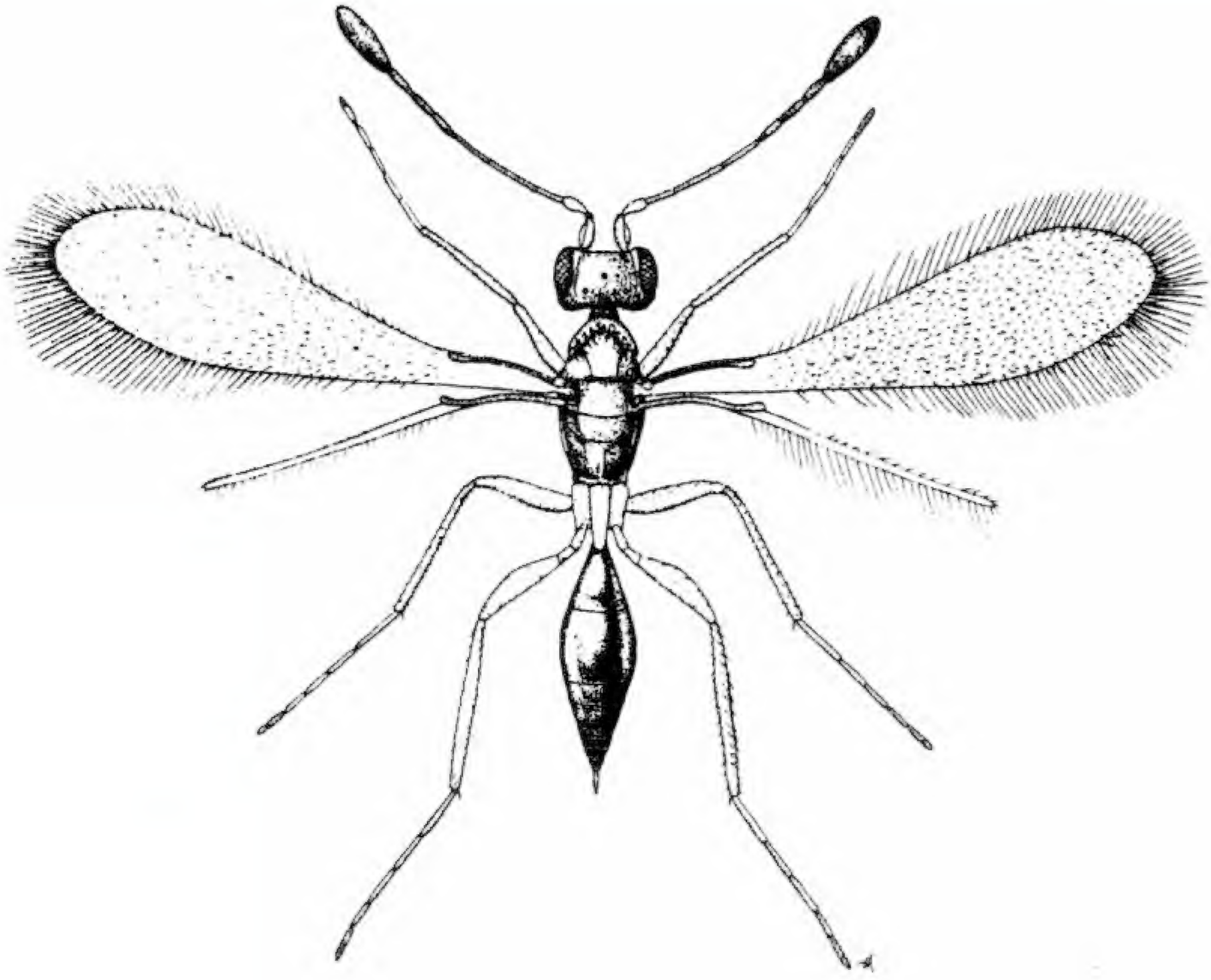
***Anaphes (Potasson) collinus* Walker, 1846**

ANTRIM: Cavehill, north of Belfast, on heath on a mountain, ♀ (lectotype), AHH (NMI) (Graham, 1982: pp 212-213).

***Anaphes (Potasson) longicornis* Walker, 1846**

Ireland (Graham, 1982: pp 213 and 238 ♂ (paralectotype), with a green ticket denoting Irish

FIGURE 9: *Polynema* sp.



origin (OUM)).

[?*Anaphes* (*Potasson*) *rectipennis* Soyka, 1949

or

?*Anaphes* (*Potasson*) *distincta* Soyka, 1953

Ireland (Graham, 1982: p. 215 ♀. The specimen bears a green label (Irish origin) reading '47.7.10' (i.e. 10 July 1847) (NMI)).]

***Arescon dimidiatum* (Walker *in* Curtis, 1832)**

DOWN: near Belfast, 15 September, AHH (Walker, 1846b: p. 51 taken many years ago; it has not since occurred; Kryger, 1950: p. 9; Graham, 1982: p. 217).

***Erythmelus flavovarius* (Walker, 1846)**

Ireland (Graham, 1982: p. 220 the syntypes of *flavovarius* were almost certainly captured by Haliday in Ireland because in his ms catalogue of Irish insects, he marked *Panthus flavovarius* as 'certainly Irish').

***Eustochus atripennis* (Walker *in* Curtis, 1832)**

DUBLIN: Ballymaice, 1100ft, ♀ 12.viii.1945, AWS (NMI) (det. WDH).

Ireland (Graham, 1982: p. 222 probably taken (by Haliday) in Ireland; his ms catalogue of Irish insects includes *Eustochus atripennis*).

***Gonatocerus ater* Förster, 1841**

synonym *Gonatocerus populi* (Viggiani, 1969)

DONEGAL: Maherabeg, near Donegal, ♀ 17.ix.1958, swept from the foliage of grey willow *Salix cinerea*, MWRG (Graham, 1973b: p. 48 as *Gonatocerus populi*).

***Gonatocerus litoralis* (Haliday, 1833)**

synonym *Gonatocerus paludis* (Debauche, 1948)

DOWN: near Holywood, common on the sea-coast (Haliday, 1833: p. 344 as *Ooctonus*; Kryger, 1950: p. 8 as *Lymaenon*; Graham, 1982: pp 223 and 238 ♀ (lectotype) (OUM)): Newcastle, ♀♀, MWRG (Graham, 1982: p. 224); Sliddery Ford, near Dundrum, 3♀♀ 22.viii.1957, AWS (Graham, 1973b: p. 47 as *Gonatocerus paludis*).

Ireland (Walker, 1846b: p. 51 as *Lymaenon*. Very abundant; Noyes, 1998: CD-ROM).

***Mymar pulchellum* Curtis, 1832**

KERRY: Hog's Head, Waterville, ♂ 12.vii.1994, yellow trap (Pintureau and Calvin, 1996: pp

115-116 and 119-120).

***Ooctonus hemipterus* Haliday, 1833**

Ireland (Walker, 1846b: p. 50; Kryger, 1950: p. 8 as *Sphecomicrus*).

***Ooctonus insignis* Haliday, 1833**

Ireland (Walker, 1846b: p. 50; Kryger, 1950: p. 8 as *Sphecomicrus*).

***Ooctonus notatus* Walker, 1846**

synonym *Ooctonus heterotomus* Förster, 1847

DUBLIN: Ballinascorney (B's'c'n'y) Gap, ♀ 12.viii.1945, AWS (NMI); KILDARE: Landentown (Landenst'n), ♀ 25.ix.1949, AWS (NMI) (both det. WDH as *Ooctonus heterotomus*).

Ireland (Walker, 1846b: p. 50; Kryger, 1950: p. 8 as *Sphecomicrus*).

***Ooctonus vulgatus* Haliday, 1833**

Ireland (Walker, 1846b: p. 50; Kryger, 1950: p. 8 as *Sphecomicrus*).

***Polynema atratum* Haliday, 1833**

KILDARE: Landenstown (Landenst'n), 29.ix.1946, AWS (NMI) (det. WDH).

New to Ireland.

***Polynema flavipes* Walker, 1846**

synonym *Polynema longula* Förster, 1847

DUBLIN: Royal Canal near Morgan's School (Sch.), ♂ 2.iv.1944, AWS (NMI); WICKLOW: Blessington, ♀ 23.viii.1942, AWS (NMI) (both det. WDH as *Polynema longulum*).

New to Ireland.

***Polynema fumipenne* Walker, 1846**

Ireland (Hellén, 1974: p. 17 as *Polynema fumipennis* Haliday in Walker).

***Polynema gracile* (Nees, 1834)**

synonym *Polynema britteni* Hincks, 1950

DUBLIN: Glenasmole, ♂ 16.viii.1944, AWS (NMI) (det. WDH) (unpublished); North Bull (Island), ♂ 19.v.1944, AWS; Portrane, ♂ 8.vi.1941, AWS; Royal (R.) Canal near Morgan's School (Sch.), ♂ 2.iv.1944, AWS; St Anne's, ♂ 26.iv.1944, AWS (Hincks, 1950: p. 184); KILDARE: Royal Canal, ♀ (paratype) 11.x.1943, AWS (Hincks, 1950: p. 187 as *Polynema britteni*); WICKLOW: Blessington, ♀ 23.viii.1943, AWS (Hincks, 1950: p. 184).

***Polynema woodi* Hincks, 1950**

DUBLIN: Lucan, ♂ (paratype) 2.iv.1943, AWS (Hincks, 1950: p. 193).

ORMYRIDAE FÖRSTER, 1856

They are robust, moderately small insects (1.1-6.7mm in length) which are metallic in colour. The body is strongly sclerotised and bent. Most are parasitoids of gall-forming insects. World-wide, there are some 60 species with three occurring in Great Britain.

***Ormyrus pomaceus* (Geoffroy, 1785)**

synonym *Ormyrus punctiger* Westwood, 1832

Ireland (Irish specimen, det. MWRG as *Ormyrus punctiger*, Haliday Collection (NMI)).

New to Ireland.

PTEROMALIDAE DALMAN, 1820

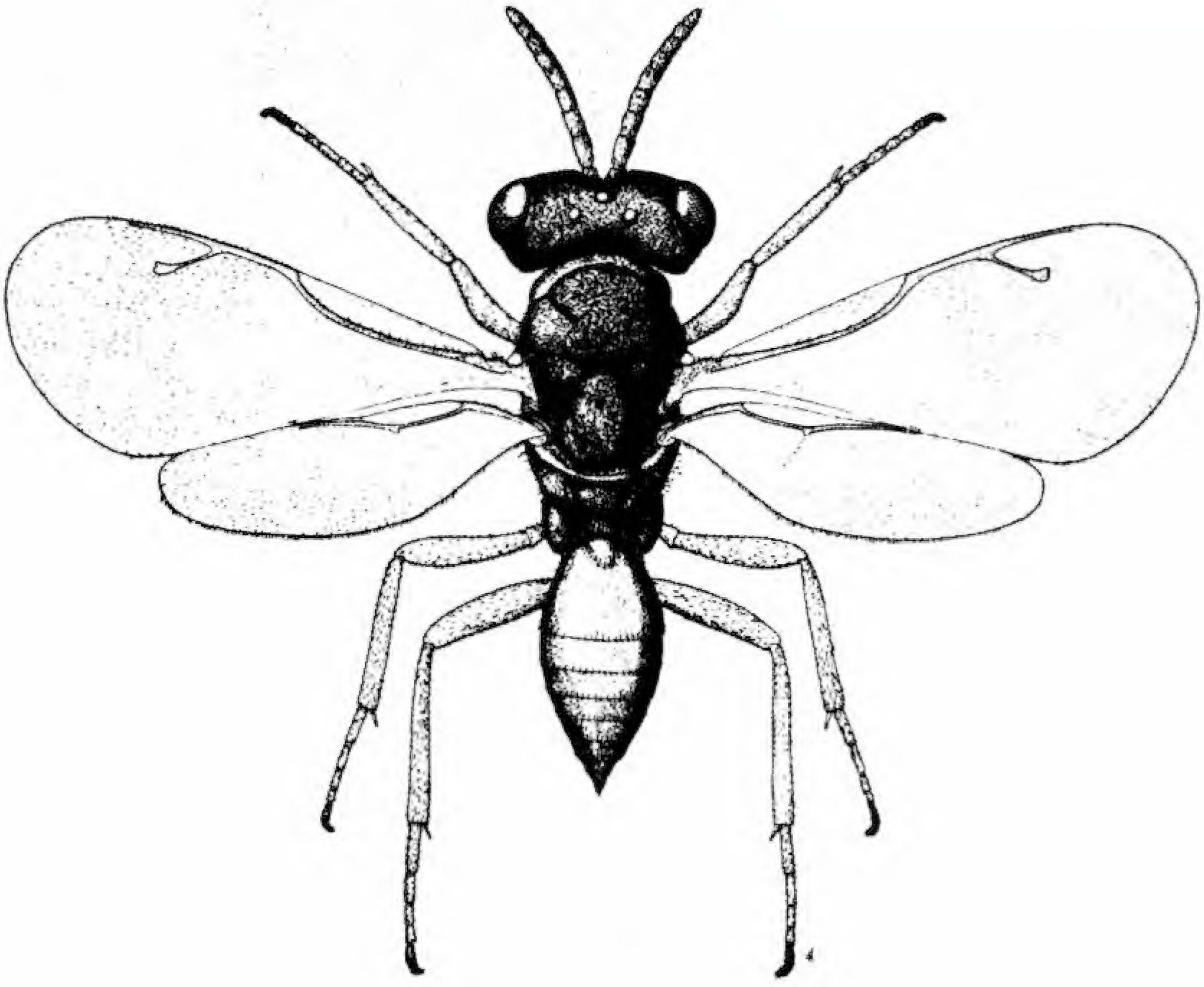
They are small to moderately large insects (1.2-6.7mm in length) with slender to quite robust bodies (Fig. 10). They are normally metallic, often strongly so. Their life-cycles are very varied including many of those associated with insect parasitoids. Many are solitary or gregarious ectoparasitoids of the larvae and pupae of Coleoptera, Diptera, Hymenoptera, Lepidoptera and Siphonaptera. Hosts concealed in plant tissues are frequently attacked. These include wood-borers, stem-miners, leaf-miners and gall-formers. World-wide, there are some 3,100 species with 532 reported from Great Britain. To-date, 167 species are recorded from Ireland.

ASAPHINAE ASHMEAD, 1904

***Asaphes vulgaris* Walker, 1834**

DUBLIN: North Bull Island, salt-marsh, July 1960-1963, BH (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153); same locality, 9.v.1982, swept in the alder *Alnus* marsh, JMOC (NMI) (O'Connor *et al.*, 1989: p. 70); KERRY: Killarney, Torc Stream, 10.ix.1981, swept from stream-side vegetation, JPOC (NMI) (O'Connor *et al.*, 1989: p. 70); KILDARE: Rye Water, 7.vii.1940, AWS (NMI) (O'Connor, 1996: p. 254); WICKLOW: Russellstown Park, 16.viii.1981, JMOC (NMI) (O'Connor *et al.*, 1989: p. 70).

FIGURE 10: ***Pteromalus*** **sp.**



CEINAE BOUČEK, 1961

***Cea pulicaris* Walker, 1837**

synonym *Cea irene* Walker, 1851

DOWN: Holywood, on grass under trees, type ♀ (probably holotype of *Cea pulicaris*), AHH (NMI) (Walker, 1837: p. 356; Graham, 1969a: p. 46 a green label "*pulicaris*" in Haliday's handwriting); DUBLIN: Portmarnock, ♀ (type of *Cea irene*), in September, on the sand-hills, AHH (NMI) (Walker, 1851: p. 213 as *Cea irene*; Kerrich and Graham, 1957: p. 276).

Ireland (Walker, 1872: p. 225 *Cea*. This genus is only known in these isles by two specimens, found in Ireland by A. H. Haliday; the one figured, and another which has wings; Kerrich and Graham, 1957: p. 276 type of *Cea pulicaris* from Holywood, Belfast. All that remains of the type of *Cea irene* are the legs and wings; Ferrière and Kerrich, 1958: p. 25 taken in Ireland by Haliday both in the brachypterous form, and also in the macropterous form described under *Cea irene*; Graham, 1969a: p. 46 detailed information given about the above types; Noyes, 1998: CD-ROM).

***Spalangiopelta procera* Graham, 1966**

DOWN: Newcastle, Tipperary Wood, ♀ (paratype) 28.ix.1959, swept in a marshy place, MWRG (Graham, 1966: p. 188).

Ireland (Graham, 1969a: p. 48).

CEROCEPHALINAE GAHAN, 1946

***Theocolax elegans* (Westwood, 1874)**

ANTRIM: Belfast mills, between 1942-1946, sometimes introduced in Plate wheat, also found in Platc wheat on a ship, parasitic on *Calandra* (Coleoptera: Curculionidae), *Rhizopertha* (Coleoptera: Bostrichidae) etc. (O'Farrell and Butler, 1948: pp 380-381 as *Choetospila*. Considered as an introduced species which had established itself in heated buildings).

***Theocolax formiciformis* Westwood, 1832**

synonym *Laesthia vespertina* Haliday, 1833

CAVAN: Cornafean, west of lake, ♀ 11.ii.1934, swept in a narrow strip of rough herbage lying between a steep-sided drumlin and a cut-away bog, RCF (Stelfox, 1941: p. 338);

DONEGAL (West): Killybegs, 18.viii.1933, taken in houses, AWS (Stelfox, 1941: p. 338);

DOWN: Holywood, AHH (Graham, 1969a: p. 63 as *Laesthia vespertina*); no locality, between 1942-1946, found in an old country provender mill, parasitic on *Anobium* (Coleoptera: Anobiidae) (O'Farrell and Butler, 1948: pp 380-381 considered a species occurring in unheated buildings and parasitic on insects associated with stored products); DUBLIN: Dublin, frequently bred from timber bored by the furniture beetle *Anobium punctatum* Degeer (*Anobium striatum* Oliver) (Coleoptera: Anobiidae) (Stelfox, 1941: p. 338); Dublin City, ♂ 4.iii.1987 and 3♂♂ 6♀♀, found associated with a wooden box infested with the furniture beetle *Anobium punctatum* in a suburban house, J. M. C. Holmes (BMNH, NMI) (O'Connor and Holmes, 1987: p. 365); KERRY: Killarney, seen on paper, F. Walker (Walker, 1872: p. 250 as *Cerocephala*; Fitch, 1879: p. 47 as *Cerocephala*); LEITRIM: Tullaghan, 4.viii.1938, taken in houses, AWS (Stelfox, 1941: p. 338); MAYO (West): The Mullet, at Carne, 19.vi.1936, taken in houses, AWS (Stelfox, 1941: p. 338).

Ireland (Noyes, 1998: CD-ROM).

Note: although Haliday (1833: p. 336 as *Laesthia vespertina*) gives no country of origin or locality for his specimens, it is of interest to quote his observations:- "On midsummer evenings I have twice taken females of this singular little insect, wandering over the leaves of a book which I was reading. Another time I found one lurking among the florets of *Taraxacum* [dandelion], as if for shelter from the mid-day sun. The only male I have met with was drowned in a basin of water".

CLEONYMINAE WALKER, 1837

***Cleonymus laticornis* Walker, 1837**

DUBLIN: Phoenix Park, 4♀♀ 23 and 24.v.1993, walking about on a bare area of wood on the trunk of an oak *Quercus* tree, riddled with numerous emergence holes belonging to *Euophryum confine* (Broun) (Coleoptera: Curculionidae), JPOC (NMI, Graham Collection) (O'Connor, 1994: p. 76).

Ireland (Noyes, 1998: CD-ROM).

EUNOTINAE ASHMEAD, 1904

***Epicopterus choreiformis* Westwood, 1833**

synonym *Ormocerus borges* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 209 as *Ormocerus borges*).

Ireland (Walker, 1848: p. 107 as *Ormocerus borges*. From Mr Walker's collection; Noyes, 1998: CD-ROM as *Ormocerus borges*).

MISCOGASTERINAE WALKER, 1833

***Ardilea convexa* (Walker, 1833)**

DOWN: Sliddery Ford, near Newcastle, 2♂♂ 6.ix.1955, AWS; White Water, Benagh, salt-marsh at the estuary, ♀ 1.vii.1957, MWRG (both Graham, 1959: p. 101).

Ireland (Graham, 1969a: p. 180; Noyes, 1998: CD-ROM).

***Glyphognathus umbelliferae* Graham, 1956**

Ireland (Graham, 1969a: p. 209; Noyes, 1998: CD-ROM).

***Halticoptera aenea* (Walker, 1833)**

synonym *Pteromalus sophron* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 270 as *Pteromalus sophron*);

KERRY: Derrynane, 2♂♂ 7.ix.1965, RRA (Askew Collection) (Askew, 1972: p. 47).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Noyes, 1998: CD-ROM as *Halticoptera sophron*).

***Halticoptera circulus* (Walker, 1833)**

DUBLIN: North Bull Island, salt-marsh, July 1960-1963, hatched from a pupa found among debris of *Enteromorpha* sp., BH (Healy, 1975: p. 236 as *Dicyclus*; Speight and Healy, 1977: p. 153 as *Dicyclus*); same locality, 19.x.1951, AWS (NMI) (O'Connor, 1996: p. 255); KERRY: Derrynane, 2♂♂ 7.ix.1965, RRA (Askew Collection) (unpublished); KILDARE: Royal Canal, 13.x.1946, AWS (NMI) (O'Connor, 1996: p. 255).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Graham, 1969a: p. 164; Hedqvist, 1975: p. 179; Noyes, 1998: CD-ROM).

***Halticoptera crius* (Walker, 1839)**

DOWN: Holywood, AHH (Walker, 1839a: p. 201 as *Miscogaster*).

***Halticoptera dimidiata* (Förster, 1841)**

synonym *Halticoptera brevicornis* Thomson, 1876

Ireland (Graham, 1969a: p. 161 as *Halticoptera brevicornis*; Hedqvist, 1975: p. 178 as *Halticoptera brevicornis*; Noyes, 1998: CD-ROM as *Halticoptera brevicornis*).

***Halticoptera flavicornis* (Spinola, 1808)**

ANTRIM: Bush Bay, 3.vi.1938, marsh in sandhills, AWS (Stelfox, 1941: p. 338).

Ireland (Hedqvist, 1975: p. 175).

***Halticoptera patellana* (Dalman, 1818)**

DUBLIN: Slade of Saggart, 7.viii.1981, swept from bracken *Pteridium aquilinum*, JPOC (NMI) (O'Connor *et al*, 1989: p. 70).

***Halticoptera smaragdina* (Curtis, 1832)**

Ireland (Graham, 1969a: p. 159; Noyes, 1998: CD-ROM).

***Lamprotatus annularis* (Walker, 1833)**

Ireland (Graham, 1969a: p. 238; Noyes, 1998: CD-ROM).

***Lamprotatus claviger* (Thomson, 1876)**

Ireland (Graham, 1969a: p. 244 as *Skeloceras clavigerum*; Noyes, 1998: CD-ROM).

***Lamprotatus novickyi* (Delucchi, 1953)**

DOWN: Tollymore Park, ♀ 25.v.1957, MWRG; WICKLOW: Glencree, ♀ 4.vii.1949, MWRG (all Graham, 1969a: p. 246 as *Skeloceras*).

***Lamprotatus splendens* Westwood, 1833**

CAVAN: beside Lough Dargan, 23.viii.1982, JMOC (NMI) (O'Connor *et al.*, 1989: p. 70); DONEGAL: Dunfanaghy, 19.vi.1955, AWS (NMI); KERRY: Killarney, August 1925, JNH (NMI) (O'Connor, 1996: p. 255).

Ireland (Graham, 1969a: p. 239; Noyes, 1998: CD-ROM).

***Merismus megapterus* Walker, 1833**

Ireland (Graham, 1969a: p. 174; Hedqvist, 1974a: p. 143; Noyes, 1998: CD-ROM).

***Merismus nitidus* (Walker, 1833)**

Ireland (Graham, 1969a: p. 176 local; Hedqvist, 1974a: p. 144; Noyes, 1998: CD-ROM).

***Merismus splendens* Graham, 1969**

SLIGO: Lough Gill, shore of, 2♀♀ (paratypes) 23.vi.1959, AWS (Graham, 1969a: p. 175).

Ireland (Hedqvist, 1974a: p. 144; Noyes, 1998: CD-ROM).

***Miscogaster maculata* Walker, 1833**

CAVAN: Virginia, 30.v.1982, swept from bluebells *Hyacinthoides* in mixed woodland, JMOC (NMI); CLARE: The Burren, near the Caher River, 17.vii.1981, swept from vegetation beside the river, JMOC (NMI); (all O'Connor *et al.*, 1989: p. 70); DUBLIN: Donabate, 15.ix.1935, AWS (Graham Collection) (BMNH) (unpublished); KERRY: Killarney, Kenmare Estate, 8.ix.1981, JPOC (NMI); Killarney, Cloghereen stream, 10.ix.1981, JPOC (NMI); WICKLOW: Russellstown Park, 16.viii.1981, JMOC (NMI) (all O'Connor *et al.*, 1989: p. 70).

***Miscogaster rufipes* Walker, 1833**

DOWN: Tullybrannigan, 28.iv.1957, AWS (Graham Collection) (BMNH); DUBLIN: Bohernabreena, 14.ix.1922, AWS (Graham Collection) (BMNH) (both upublished).

Ireland (Graham, 1969a: p. 230; Noyes, 1998: CD-ROM).

***Nodisoplata diffinis* (Walker, 1874)**

synonym *Seladerma curvus* (Thomson, 1876)

DUBLIN: Portmarnock, 2 specimens, AHH (NMI) (det. MWRG as *Seladerma curvus*) (unpublished).

Ireland (Graham, 1969a: p. 182; Noyes, 1998: CD-ROM).

***Rhicnocoelia constans* (Walker, 1836)**

KERRY: Bolus Point, ♀ 8.ix.1965, in car, RRA (Askew Collection); Derrynane, 3♂♂ 7.ix.1965, RRA (Askew Collection) (both unpublished); LEITRIM: Bundrowes, Bundoran district, 1.viii.1933, AWS (NMI) (O'Connor, 1996: p. 256).

Ireland (Graham, 1969a: p. 170 in the British Isles it is most frequent in damp places, on moorland and the coast; Noyes, 1998: CD-ROM).

***Rhicnocoelia impar* (Walker, 1836)**

Ireland (Graham, 1969a: p. 170; Noyes, 1998: CD-ROM).

Seladerma euroto **(Walker, 1839)**

DOWN: Holywood, 2♀♀ (2 syntypes, one selected as lectotype), AHH (NMI) (lectotype), (BMNH) (Walker, 1839a: p. 198 as *Miscogaster*; Graham, 1969a: p. 204).

Ireland (Noyes, 1998: CD-ROM).

***Seladerma geniculatum* (Zetterstedt, 1838)**

DUBLIN: North Bull (Island) ♂ emerged 5.vi.1948, from a puparium of *Phytomyza varipes* Macquart (Diptera: Agromyzidae) in seeds of yellow rattle *Rhinanthus* (*R. minor* L.) collected the previous year, EOM (Graham, 1969a: p. 193).

Ireland (Noyes, 1998: CD-ROM).

***Seladerma laetum* Walker, 1834**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Graham, 1969a: p. 204 common; Noyes, 1998: CD-ROM).

***Seladerma scaea* (Walker, 1844)**

CLARE: Mullagh More, ♂ 19.iii.1966, reared from *Phytomyza calthophila* Hering (Diptera: Agromyzidae) on marsh-marigold *Caltha palustris* L., GCDG (Graham, 1969a: p. 198).

Ireland (Noyes, 1998: CD-ROM).

***Seladerma scoticum* (Walker, 1833)**

Ireland (Graham, 1969a: p. 197 in the British Isles the species is very local; I have captured it on coastal sand dunes, also on moorland in inland situations).

***Seladerma tarsale* (Walker, 1833)**

CAVAN: Virginia, 30.v.1982, swept in a mixed woodland, JMOC (NMI); DUBLIN: Slade of Saggart, 7.viii.1981, JPOC (NMI); WICKLOW: Glendalough, 8.xi.1981, JPOC (NMI); Russellstown Park, 16.viii.1981, JMOC (NMI) (all O'Connor *et al.*, 1989: p. 71).

Ireland (Graham, 1969a: p. 202 in the British Isles, it is the commonest species of the genus and may be found almost everywhere, even in large cities (in parks and other suitable places); Noyes, 1998: CD-ROM).

***Stictomischus obscurus* (Walker, 1833)**

Ireland (Graham, 1969a: p. 224; Noyes, 1998: CD-ROM).

***Stictomischus scaposus* Thomson, 1876**

ANTRIM: Rea's Wood, 30.v.1975, RN (UM); WICKLOW: Athdown, 20.viii.1944, AWS (NMI) (both O'Connor, 1996: p. 257); same locality, 13.viii.1954, MWRG (Graham Collection) (BMNH) (unpublished).

Ireland (Graham, 1969a: p. 220 not uncommon in the British Isles; I sweep it most often from foliage of bracken (*Pteridium aquilinum*); Noyes, 1998: CD-ROM).

***Thinodytes cyzicus* (Walker, 1839)**

Ireland (Walker, 1839: p. 200 as *Miscogaster*; Graham, 1969a: p. 167; Hedqvist, 1975: p. 180; Noyes, 1998: CD-ROM).

***Tricyclomischus celticus* Graham, 1956**

DUBLIN: Killakee Park, ♀♀ 7.ii.1956, beaten from monkey puzzle *Araucaria*, AWS (Graham, 1969a: p. 168); KILDARE: Leixlip, Royal Canal, ♀ (type) 12.iv.1952, AWS (Graham, 1956: p. 81).

Ireland (Noyes, 1998: CD-ROM).

***Xestomnaster chrysochlorus* (Walker, 1846)**

Ireland (Graham, 1969a: p. 233; Noyes, 1998: CD-ROM).

***Xestomnaster mazares* (Walker, 1844)**

KERRY (South): Caragh Lake, ♂ 17.ix.1953, RCF (Graham, 1969a: p. 233).

Ireland (Noyes, 1998: CD-ROM).

ORMOCERINAE WALKER, 1833

***Ormocerus vernalis* Walker, 1834**

DOWN: Holywood, AHH (Graham, 1969a: p. 253 "Holywood Mr Haliday" annotation in Walker's copy of his *Monographia*).

Ireland (Graham, 1969a: p. 253; Noyes, 1998: CD-ROM).

***Semiotellus mundus* (Walker, 1834)**

DUBLIN: Slade of Saggart, 1.xi.1981, swept from bracken *Pteridium aquilinum*, JMOC (NMI); WEXFORD: Curracloe, 12.vi.1982, swept from sand-dunes, JMOC (NMI) (both O'Connor *et al.*, 1989: p. 71); WICKLOW: Athdown, 21.vi.1933, AWS (NMI) (O'Connor, 1996: p. 257).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI); Graham, 1969a: p. 257; Noyes, 1998: CD-ROM).

***Systasis* (*Systasis*) *parvula* Thomson, 1876**

Ireland (Graham, 1969a: p. 263 all the specimens which I have captured were taken from weeds at the edges of cultivated fields. Imagines in July; Noyes, 1998: CD-ROM).

PANSTENONINAE WALKER, 1846

***Panstenon oxylus* (Walker, 1839)**

synonym *Panstenon pidius* Walker, 1850

KILDARE: Royal (R.) Canal, 15.viii.1943, AWS (NMI) (det. MWRG).

Ireland (Walker, 1850: p. 132 as *Panstenon pidius*. In Mr Haliday's collection; Graham, 1969a: p. 94 Irish lectotype ♂ of *Panstenon pidius*, the pin which carries it has its head coated with green sealing-wax (one of Haliday's methods of indicating Irish origin) (NMI); Noyes, 1998: CD-ROM as *Panstenon pidius*).

PIRENINAE HALIDAY, 1844

***Ecrizotes longicornis* (Walker, 1848)**

Ireland (Walker, 1848: p. 105 as *Gastrancistrus*. From Mr Walker's collection).

***Gastrancistrus autumnalis* (Walker, 1834)**

Ireland (Graham, 1969a: p. 297; Noyes, 1998: CD-ROM).

***Gastrancistrus coactus* Graham, 1969**

DONEGAL (West): Sessiagh or Kill Lough, ♀ 10.vi.1955, AWS (Graham Collection) (Graham, 1969a: p. 307).

Ireland (Noyes, 1998: CD-ROM).

***Gastrancistrus crassus* Walker, 1834**

Ireland (Graham, 1969a: p. 314 uncommon; I have swept it in rough grassy fields and damp meadows; Noyes, 1998: CD-ROM).

***Gastrancistrus flavicornis* (Walker, 1834)**

synonym *Ormocerus drymo* Walker, 1839

DUBLIN: at Portmarnock (Port Marnock) (Walker, 1839a: p. 205 as *Ormocerus drymo*. Erroneously, the locality is given as near Belfast).

Ireland (Noyes, 1998: CD-ROM as *Ormocerus drymo*).

***Gastrancistrus hemigaster* Graham, 1969**

DOWN: Tollymore Park, 2♀♀ (paratypes) 24.vi.1957, MWRG (Graham Collection) (Graham, 1969a: p. 315; Noyes, 1998: CD-ROM).

***Gastrancistrus laticeps* Graham, 1969**

WICKLOW: Knickeen, ♀ (paratype) 2.vii.1950, MWRG (Graham Collection) (Graham, 1969a: p. 318 ♀ head and thorax usually bright green, in an Irish female bronze-green).

Ireland (Noyes, 1998: CD-ROM).

***Gastrancistrus puncticollis* (Thomson, 1876)**

KERRY: Derrynane, ♂ 7.ix.1965, RRA (Askew Collection) (unpublished).

Ireland (Graham, 1969a: p. 324 fairly common in rough grassy fields and meadows; Noyes, 1998: CD-ROM).

***Gastrancistrus salicis* (Nees, 1834)**

ANTRIM: Ballycastle, ♂♂ ♀♀ 7.vi.1927, reared from cecidomyiid (Diptera) galls on willow *Salix*, Miss Knowles (Graham, 1969a: p. 304); WICKLOW: Deputy's Pass, 22.iii.1931, emerged 8.vi.1931 from galls on willow *Salix*, AWS (NMI) (O'Connor, 1996: p. 255).

Ireland (Noyes, 1998: CD-ROM).

***Macroglenes chalybeus* (Haliday, 1833)**

DOWN: Newcastle, 29.vi.1957, AWS (Graham Collection) (BMNH) (unpublished).

Ireland (Graham, 1969a: p. 349 as *Pirene*, common. Irish lectotype ♀ labelled "Ireland, Haliday" (NMI); Noyes, 1998: CD-ROM).

***Macroglenes conjungens* (Graham, 1969)**

KERRY: Coral Strand near Sneem, ♀ 2.ix.1965, RRA (Askew Collection); Derrynane, ♀ 7.ix.1965, RRA (Askew Collection) (both unpublished); KILDARE: Royal Canal, ♂ (paratype) 5.viii.1951, AWS (Graham Collection) (Graham, 1969a: p. 345 as *Pirene*).

Ireland (Noyes, 1998: CD-ROM).

***Macroglenes decipiens* (Graham, 1969)**

WICKLOW: Bray Head, coast near, ♂ (paratype) 16.viii.1954, MWRG (Graham Collection); the Glen of the Downs, ♂ (paratype) 23.viii.1954, MWRG (Graham Collection) (Graham, 1969a: p. 343 as *Pirene*).

Ireland (Noyes, 1998: CD-ROM).

***Macroglenes eximius* (Haliday, 1833)**

Ireland (Four Irish paratypes, det. MWRG, Haliday Collection (NMI) (unpublished); Graham, 1969a: p. 345 as *Pirene*, Irish lectotype ♀ bears a small green ticket, indicating Irish origin

(BMNH); Noyes, 1998: CD-ROM).

***Macroglenes gramineus* (Haliday, 1833)**

Ireland (Graham, 1969a: p. 347 as *Pirene*, Irish lectotype ♀ with a green label, "graminea" in Haliday's handwriting (NMI); Noyes, 1998: CD-ROM).

***Macroglenes microcerus* Haliday, 1844**

TIPPERARY (South): Ballinacourty, 9.vi.1934, AWS (Graham Collection) (BMNH) (unpublished).

Ireland (Graham, 1969a: pp 343-344 as *Pirene*, Irish lectotype ♂, with a green label (NMI) "microcerus" in Haliday's handwriting, Irish paralectotype ♂ ("syntype"), with a small green square label (BMNH); Noyes, 1998: CD-ROM).

***Macroglenes varicornis* (Haliday, 1833)**

Ireland (Graham, 1969a: p. 348 as *Pirene*, in the British Isles it is fairly common although the male, as Haliday remarked, is rare. I find it most abundantly in damp meadows. Irish syntypes (1♂ 5♀♀) bearing a green label "varicornis" in Haliday's handwriting, ♀ selected as lectotype (BMNH); Noyes, 1998: CD-ROM).

***Stenophrus compressus* Förster, 1841**

synonym *Macroglenes umbellatarum* Haliday, 1844

Ireland (Graham, 1969a: p. 333 lectotype ♂ of *Macroglenes umbellatarum*, bears a green label "Macroglen[es] umbellata[rum]" in Haliday's handwriting (BMNH); Noyes, 1998: CD-ROM).

PTEROMALINAE DALMAN, 1820

***Ablaxia anaxenor* (Walker, 1845)**

KERRY: Killarney, Muckross House, 10.ix.1981, found crawling inside the flower of an ornamental shrub in the gardens, JPOC (NMI) (O'Connor *et al.*, 1989: p. 70).

***Anisopteromalus calandrae* (Howard, 1881)**

ANTRIM: Belfast, between 1942-1946, sometimes introduced into the dock silos in Plate wheat, Australian wheat and Plate maize, on two occasions in fair numbers, but was not found in mills (O'Farrell and Butler, 1948: pp 380 and 382 as *Aplastomorpha*. Considered an introduced species which did not appear to have established itself).

***Bairamia fuscipes* Waterston, 1929**

DUBLIN: Tallaght, 22.iv.1944, from the nest of a house martin *Delichon urbica* L., Mr Fox (Graham Collection) (BMNH).

New to Ireland.

***Callitula pyrrhogaster* (Walker, 1833)**

DOWN: Tullybrannigan, 9.ix.1956, AWS (Graham Collection) (BMNH) (unpublished); DUBLIN: Howth, south cliffs, 2.v.1930, EOM (NMI) (O'Connor, 1996: p. 254); Kilbarrack, 15.iv.1944, AWS and EOM (Graham Collection) (BMNH) (unpublished); KILDARE: Royal Canal, 12.vii.1944, AWS (Graham Collection) (BMNH) (unpublished); MAYO: Westport, mainland, ♀ July, in woods, JNH (Morley, 1911; P. 17 as *Micromelus pyrogaster*); TIPPERARY (South): Ballinacourty (B'c't'y), 28.v.1944, AWS (Graham Collection) (BMNH) (unpublished); WEXFORD: Curracloe, ruined cottage, 27.vii.1937, AWS (NMI) (O'Connor, 1996: p. 254).

***Chlorocytus diversus* (Walker, 1836)**

Ireland (Graham, 1969a: p. 620; Noyes, 1998: CD-ROM).

***Chlorocytus formosus* (Walker, 1835)**

ANTRIM: Lough Neagh at Selshan, ♂ ♀ 26.vi.1957, MWRG and AWS (Graham and Claridge, 1965: p. 291).

Ireland (Graham, 1969a: p. 619; Noyes, 1998: CD-ROM).

***Chlorocytus longiscapus* Graham, 1965 in Graham and Claridge, 1965**

WICKLOW: Killoughter, ♀ (paratype) 15.viii.1951, AWS (Graham and Claridge, 1965: p. 291).

Ireland (Graham, 1969a: p. 619; Noyes, 1998: CD-ROM).

***Chlorocytus phalaridis* Graham, 1965 in Graham and Claridge, 1965**

Ireland (Graham, 1969a: p. 623; Noyes, 1998: CD-ROM).

***Chlorocytus spicatus* (Walker, 1835)**

DOWN: no localities, numerous swept specimens (Graham and Claridge, 1965: p. 300); SLIGO: Trawalua, 30.vii.1933, AWS (NMI) (O'Connor, 1996: p. 254).

Ireland (Graham, 1969a: p. 621; Noyes, 1998: CD-ROM).

***Chlorocytus ultonicus* Graham, 1965 in Graham and Claridge, 1965**

ANTRIM: Lough Neagh at Selshan, shore, 3♀♀ (paratypes) 26.vi.1957, AWS; DOWN: River Quoile at Inch, bank, 2♀♀ (paratypes) 21.vi.1957, MWRG (both Graham and Claridge, 1965: pp 304-305).

Ireland (Graham, 1969a: p. 623; Noyes, 1998: CD-ROM).

***Coelopisthia extenta* Walker, 1835**

LAOIS: Portarlington, 26.vii.1936, AWS (NMI) (O'Connor, 1996: p. 254).

****Coruna clavata* Walker, 1833**

CARLOW: Kilcarry, 21.v.1934, AWS (Graham Collection) (BMNH).

New to Ireland.

***Cryptoprymna atra* (Walker, 1833)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Graham, 1969a: p. 141; Noyes, 1998: CD-ROM).

***Cyclogastrella simplex* (Walker, 1834)**

synonym *Cyclogastrella deplanata* (Nees, 1834)

ANTRIM: Bushfoot, AWS (USNM) (O'Connor, 1996: p. 254 as *Cyclogastrella deplanata*); DOWN: Tullybrannigan, 7.xii.1957, AWS (Graham Collection as *Cyclogastrella deplanata*) (BMNH) (unpublished); DUBLIN: Saggart, 14.iv.1948, AWS (NMI) (O'Connor, 1996: p. 254 as *Cyclogastrella deplanata*).

***Cyrtogaster clavicornis* Walker, 1833**

KERRY: Killarney, Ross Castle, 16.ix.1981, JPOC (O'Connor *et al.*, 1989: p. 70 as *Polycystus*).

Ireland (Graham, 1969a: p. 144 as *Polycystus*; Noyes, 1998: CD-ROM).

***Cyrtogaster vulgaris* Walker, 1833**

DUBLIN: Clondalkin, 16-29.iii.1982, taken in a Malaise trap in a suburban garden, JMOC (NMI) (O'Connor *et al.*, 1989: p. 70); North Bull Island, salt-marsh, August 1960-1963, BH (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153); same locality, 9.v.1982, swept in the alder *Alnus* marsh, JMOC (NMI); WICKLOW: Russborough, 16.iv.1982, JMOC (NMI); Russellstown Park, 16.viii.1981, JMOC (NMI) (all O'Connor *et al.*, 1989: p. 70).

***Dibrachys* (*Dibrachys*) *lignicola* Graham, 1969**

DUBLIN: Harold's Cross, Clareville Road, ♀ (paratype) 14.vi.1937, ♀ (paratype) 15.vi.1937, ♀ (paratype) 27.ix.1937, ♀ (paratype) 17.vi.1941, AWS; same locality, ♀ (paratype) 21.viii.1954; ♀ (holotype), ♂ several ♀♀ (paratypes) 22.viii.1954, on a wooden post in garden, MWRG (Graham, 1969a: p. 810 OUM, Stelfox and Graham Collections; note: a damaged paratype (27.ix.1937) was transferred from USNM to NMI).

Ireland (Noyes, 1998: CD-ROM).

***Diglochis sylvicola* (Walker, 1835)**

Ireland (Graham, 1969a: p. 783 local, often in woodland habitat; I have sometimes swept it from the foliage of willows (*Salix* spp.); Noyes, 1998: CD-ROM).

***Dimachus cingulum* (Nees, 1834)**

synonym *Dimachus discolor* (Walker, 1836)

ANTRIM: Belfast, between 1942-1946, in old buildings in the dock area, parasitic on Ptinidae (Coleoptera) (O'Farrell and Butler, 1948: pp 380-381 as *Dimachus discolor*, considered a species occurring in unheated buildings and parasitic on insects associated with stored products); DERRY: Londonderry, between 1942-1946, in old buildings in the dock area, parasitic on Ptinidae (O'Farrell and Butler, 1948: pp 380-381 as *Dimachus discolor*); DUBLIN: Talbot Street, corn-store, 1927, from dog-biscuits and possibly parasitic on *Ptinus tectus* Boieldieu (Coleoptera: Ptinidae), EOM (NMI) (O'Connor, 1996: p. 255 as *Dimachus discolor*).

Ireland (Graham, 1969a: p. 823 as *Dimachus discolor*; Hedqvist, 1974b: p. 54 as *Dimachus discolor*; Noyes, 1998: CD-ROM).

***Dirhicnus ramealis* (Nees, 1834)**

synonym *Dirhicnus pirus* (Walker, 1839)

synonym *Pteromalus toxicrate* Walker, 1839

DOWN: Holywood, AHH (Walker, 1839a: p. 226 as *Pteromalus toxicrate*).

Ireland (Graham, 1969a: p. 788 as *Dirhicnus pirus*; Noyes, 1998: CD-ROM as *Dirhicnus pirus* and *Dirhicnus toxicrate*).

***Erythromalus nubilipennis* (Walker, 1835)**

KILDARE: Royal Canal, 30.vii.1944, AWS (NMI) (O'Connor, 1996: p. 255).

Ireland (Graham, 1969a: p. 470; Noyes, 1998: CD-ROM).

***Eumacepolus* (*Oxycepolus*) *obscurior* Graham, 1961**

DOWN: Donard Lodge Woods, near Newcastle, ♂ (holotype) 25.ix.1958, MWRG (Graham Collection) (Graham, 1961d: p. 175; Graham, 1969a: pp 636-637; Noyes, 1998: CD-ROM).

***Eumacepolus* (*Oxycepolus*) *pulcher* Graham, 1961**

DUBLIN: Bushy Park, ♀ 15.xi.1955, AWS (Graham, 1961d: p. 175); The Furry Glen, ♂ (holotype) 26.ix.1937, AWS (Graham Collection) (Graham, 1961d: p. 175; Graham, 1969a: p. 636); The Slade of Saggart, ♂ 22.ix.1948, AWS (Graham, 1961d: p. 175).

Ireland (Noyes, 1998: CD-ROM).

[*Gyrinophagus aper* (Walker, 1839)

Ireland (Hedqvist, 1978: p. 288; Ashe *et al.*, 1998: p. 25; Noyes, 1998: CD-ROM).

Graham (1969a: pp 777-778 considered that *Gyrinophagus cychreus* was a possible synonym of *Gyrinophagus aper*) and the above records may not therefore refer to the true *Gyrinophagus aper*).]

***Gyrinophagus cychreus* (Walker, 1850)**

DUBLIN: Glasnevin (Glassnevin), waterside (National Botanical Gardens), ♂ 2.viii.1849, AHH (NMI); Phoenix Park, pond in the Zoological Gardens, September, found on the edge...where *Notiphila cinerea* Fallén (Diptera: Ephydridae) and *Ephydra littoralis* (now *Parydra littoralis* (Meigen)) (or *coarctata* (Fallén)) (Diptera: Ephydridae) were abundant (Walker, 1850: p. 132 as *Urolepis*. In the collection of Mr Haliday; Graham, 1969a: p. 778 who considered *Gyrinophagus cychreus* as a possible synonym of *Gyrinophagus aper*).

Ireland (Noyes, 1998: CD-ROM).

***Habritys brevicornis* (Ratzeburg, 1844)**

WICKLOW: Powerscourt Deerpark, 16.ix.1926, AWS (NMI); Rathdrum, 8.vii.1926, AWS (NMI) (O'Connor, 1996: p. 255).

Ireland (Graham, 1969a: p. 427; Noyes, 1998: CD-ROM).

***Hobbya stenonota* (Ratzeburg, 1848)**

DUBLIN: Phoenix Park, near the Castleknock Gate, ♀♀ emerged 20-28.xii.1992 and 9.i.1993, from oak apple galls of *Biorrhiza pallida* (Olivier) (Hymenoptera: Cynipidae) collected off oaks *Quercus* on 31.x.1992, JPOC (NMI) (O'Connor, in press, b).

***Homoporus luniger* (Nees, 1834)**

synonym *Pteromalus zonaras* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 227 as *Pteromalus zonaras*);

KERRY: Rossbehy, 12.ix.1981, swept from vegetation on sand-dunes, JMOC (NMI)

(O'Connor *et al.*, 1989: p. 70).

Ireland (Noyes, 1998: CD-ROM as *Homoporus zonaras*).

***Isocyrtus laetus* Walker, 1833**

WICKLOW: Coan, Glen of Imaal, 25.vi.1933, AWS (Graham Collection) (BMNH).

New to Ireland.

***Lampoterma bianellatum* Graham, 1969**

ANTRIM: Selshan, by Lough Neagh, ♀ (paratype) 26.vi.1957, taken in marshy ground by the shore, MWRG (Graham Collection) (Graham, 1969a: p. 689).

***Leptomeraporus nicaee* (Walker, 1839)**

synonym *Meraporus tenuicornis* Graham, 1957

DUBLIN: North Bull (Island), ♂ (holotype of *Meraporus tenuicornis*) 11.v.1949, AWS (Graham Collection) (Graham, 1957: p. 220; Graham, 1969a: p. 687).

Ireland (Graham, 1969a: p. 687; Noyes, 1998: CD-ROM).

***Meraporus graminicola* Walker, 1834**

ANTRIM: Belfast, between 1942-1946, frequently found in mills, into which it was introduced in Plate wheat, Plate maize and Australian wheat, it was recorded from Plate maize on a ship, parasitic on *Calandra* (Coleoptera: Curculionidae) and other beetles (O'Farrell and Butler, 1948: pp 380-381 considered an introduced species which had established itself in heated buildings); DUBLIN: North Bull Island, salt-marsh, August 1960-1963, BH (Healy, 1975: p. 236; Speight and Healy, 1977: p. 153); Portmarnock, 18.vi.1925, EOM (Graham Collection) (BMNH); Portrane, 27.vii.1948, AWS (Graham Collection) (BMNH) (both unpublished); KERRY: Derrynane, ♀ 7.ix.1965, RRA (Askew Collection) (unpublished); MAYO: Cartron Point, The Mullet, 8.ix.1933, EOM (NMI); SLIGO: Trawalua, 12.viii.1938, AWS (NMI); WICKLOW: Athdown, 10.viii.1947 and 30.viii.1944, AWS (NMI) (all O'Connor, 1996: p. 255); Murrough, 18.ix.1949, AWS (Graham Collection) (BMNH) (unpublished).

***Mesopolobus aequus* (Walker, 1834)**

KILDARE: Tankardstown, 30.iv.1934, AWS (NMI) (O'Connor, 1996: p. 256).

***Mesopolobus amaenus* (Walker, 1843)**

Ireland (Schönrogge *et al.*, 1995: p. 54 reared from knopper gall of *Andricus quercuscalicis* (Burgsdorf) (Hymenoptera: Cynipidae)).

***Mesopolobus diffinis* (Walker, 1834)**

CLARE: Fanore, sand-dunes, August 1955, AWS (Graham Collection) (BMNH); WICKLOW: Glen of the Downs, August 1956, MWRG (Graham Collection) (BMNH) (both unpublished).

Ireland (Graham, 1969a: p. 669; Noyes, 1998: CD-ROM).

***Mesopolobus dubius* (Walker, 1834)**

synonym *Mesopolobus ovatus* (Nees, 1834)

DUBLIN: Lucan, 5.viii.1943, AWS (NMI) (O'Connor, 1996: p. 256); WICKLOW: Athdown, 3.viii.1954, MWRG (Graham Collection) (BMNH); Devil's Glen, 20.ix.1954, AWS (Graham Collection) (BMNH); Glen of the Downs, August 1954, MWRG (Graham Collection as *Mesopolobus ovatus*) (BMNH); Glending, 19.viii.1954, MWRG (Graham Collection) (BMNH) (all unpublished).

***Mesopolobus fasciiventris* Westwood, 1833**

WICKLOW: Athdown, August 1954, MWRG (Graham Collection) (BMNH); Glending, July 1954, MWRG (Graham Collection) (BMNH).

New to Ireland.

***Mesopolobus incultus* (Walker, 1834)**

DUBLIN: North Bull Island, salt-marsh, September 1960-1963, BH (Healy, 1975: p. 236 as *Mesopolobus incultum*; Speight and Healy, 1977: p. 153 as *Mesopolobus incultum*).

***Mesopolobus laticornis* (Walker, 1834)**

Ireland (Graham, 1969a: p. 661; Noyes, 1998: CD-ROM).

***Mesopolobus nobilis* (Walker, 1834)**

Ireland (Graham, 1969a: p. 656; Noyes, 1998: CD-ROM).

***Mesopolobus phragmitis* (Erdös, 1957)**

Ireland (Graham, 1969a: p. 664; Noyes, 1998: CD-ROM).

***Mesopolobus pinus* Hussey, 1960**

DUBLIN: The Slade of Saggart, 17.xi.1935, AWS (Graham Collection) (BMNH).

New to Ireland.

***Mesopolobus sericeus* (Forster, 1770)**

synonym *Mesopolobus jucundus* (Walker, 1834)

DUBLIN: Dublin area, reared from the agamic knopper galls of *Andricus quercuscalicis* (Burgsdorf) (Hymenoptera: Cynipidae), JPOC; Phoenix Park, ♀ emerged 26.iv.1992 from an agamic cola-nut gall of *Andricus lignicola* (Hartig) (Hymenoptera: Cynipidae) collected on 11.v.1992, JMOC (both O'Connor *et al.*, 1993: p. 252 as *Mesopolobus jucundus*).

Ireland (O'Connor *et al.*, 1993: p. 252 as *Mesopolobus jucundus*, reared from the agamic marble galls of *Andricus kollari* (Hartig) (Hymenoptera: Cynipidae); Noyes, 1998: CD-ROM as *Mesopolobus jucundus*).

***Mesopolobus tibialis* (Westwood, 1833)**

CORK: Roches, Glengarriff, 19.vii.1935, AWS (NMI) (O'Connor, 1996: p. 256); DUBLIN: St Anne's, Clontarf, emerged May 1927 from galls of *Andricus kollari* (Hartig) (Hymenoptera: Cynipidae), EOM (Graham Collection) (BMNH) (unpublished); KERRY: Killarney, Torc Stream, 10.ix.1981, JPOC (NMI) (O'Connor *et al.*, 1989: p. 70); TIPPERARY: Bansha Wood, 30.ix.1943, AWS (NMI) (O'Connor, 1996: p. 256).

***Mesopolobus xanthocerus* (Thomson, 1878)**

Ireland (Graham, 1969a: p. 675; Noyes, 1998: CD-ROM).

***Pachyneuron planiscuta* Thomson, 1878**

KERRY: Derrynane, ♂ 7.ix.1965, RRA (Askew Collection) (unpublished).

Ireland (Graham, 1969a: p. 834; Noyes, 1998: CD-ROM).

***Pegopus inornatus* (Walker, 1834)**

synonym *Prosopon montanum* Walker, 1837

DOWN: near Belfast, both ♂♂ ♀♀ pretty common, found...on the mountain heaths, AHH (Walker, 1850: p. 133 as *Prosopon montanum*); WICKLOW: Lugnaquilla, between 590m and 680m, ♂♂ ♀♀ 28.iv.1949, MWRG (Graham Collection) (BMNH) (Graham, 1993b: p. 16).

Ireland (Graham, 1969a: p. 685; Noyes, 1998: CD-ROM).

***Pegopus leptomerus* Graham, 1969**

WICKLOW: Glending, 2♂♂ (paratypes) 19.viii.1954, swept from herbage in a deciduous wood, MWRG (Graham Collection) (Graham, 1969a: p. 686).

Ireland (Noyes, 1998: CD-ROM).

***Peridesmia congrua* (Walker, 1835)**

Ireland (Graham, 1969a: p. 702; Noyes, 1998: CD-ROM).

***Platygerrhus ductilis* (Walker, 1836)**

DUBLIN: Phoenix Park, 5♀♀ 1.vi.1999, resting on a bare area of wood, devoid of bark and riddled with numerous insect emergence holes (*Euophyrum confine* Broun (Coleoptera: Curculionidae) and ?*Anobium* (Coleoptera: Anobiidae)), on a trunk of a large oak *Quercus*, JPOC (O'Connor, 2000b: p. 130).

***Platygerrhus longigena* Graham, 1969**

KERRY (North): Headley Bridge, ♂ (paratype) 28.vi.1934, AWS (Graham Collection); WICKLOW: The Glen of the Downs, ♂ (holotype) 23.viii.1954, MWRG (Graham Collection) (Graham, 1969a: p. 122).

Ireland (Graham, 1969a: p. 122 unlocalized, but probably IRELAND: 1♂ in Haliday collection (No. 874); Noyes, 1998: CD-ROM).

***Plutothrix bicolorata* (Spinola, 1808)**

synonym *Plutothrix scenicus* (Walker, 1836)

CORK (West): Lodge Wood, Glengarriff, 16.vii.1935, AWS (Graham Collection) (BMNH) (unpublished); CORK: Roche's Point, Glengarriff, 26.vii.1935, AWS (NMI) (O'Connor, 1996: p. 256 as *Plutothrix scenicus*; DOWN: Murlough, 10.viii.1964, AWS (USNM); DUBLIN: near Feltrim, 28.vi.1925, reared from a log, EOM (NMI) (all O'Connor, 1996: p. 256 as *Plutothrix scenicus*); Jobstown, 12.ix.1951, AWS (Graham Collection) (BMNH); Raheny, 5.vii.1925, on log at swan's nest, EOM (Graham Collection) (BMNH); KERRY: Blackstones, 7.vii.1934, AWS (NMI) (O'Connor, 1996: p. 256 as *Plutothrix scenicus*); same locality, 6 and 7.vii.1934, AWS (Graham Collection) (BMNH); KILDARE: Landenstown, 30.viii.1939, AWS (Graham Collection) (BMNH); Royal Canal, 11.vii.1943 and 30.vii.1944, AWS (Graham Collection) (BMNH); LEITRIM: Tullaghan, 25.vi.1936, AWS (Graham Collection) (BMNH) (unpublished); MEATH: Ratoath, ♀ 13.vii.1937, AWS and G. M. Stelfox (Kerrich and

Graham, 1957: p. 295 as *Plutothrix scenicus*); WICKLOW: Enniskerry, 1.vi.1932, from log, AWS (Graham Collection) (BMNH); Magherabeg, 11.vii.1926, AWS (Graham Collection) (BMNH) (all unpublished).

Ireland (Walker, 1836: p. 11 as *Pteromalus scenicus*, Mr Haliday; Ferrière and Kerrich, 1958: p. 28 as *Plutothrix scenicus*. Stelfox; Graham, 1969a: p. 105 as *Plutothrix scenicus*; Noyes, 1998: CD-ROM as *Plutothrix scenicus*).

***Plutothrix coelius* (Walker, 1839)**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 273 as *Pteromalus*; Graham, 1969a: p. 105; Kerrich and Graham, 1957: p. 298).

Ireland (Kerrich and Graham, 1957: p. 297 Irish type ♀ (BMNH); Ferrière and Kerrich, 1958: p. 27 A. H. Haliday; Taylor, 1959: p. 236; Graham, 1969a: p. 105 the type ♀ bears a small green ticket (indicating Irish origin); Noyes, 1998: CD-ROM).

***Polyscelis conspersa* (Walker, 1835)**

WICKLOW: The Glen of the Downs, ♀ 23.viii.1954, MWRG (Graham, 1969a: p. 699 as *Nephelomalus*).

***Pseudocatolaccus nitescens* (Walker, 1834)**

KERRY: Derrynane, ♂ ♀ 7.ix.1965, RRA (Askew Collection); Glencar, 3♂♂ 11.ix.1965, RRA (Askew Collection) (both unpublished); WICKLOW: Devil's Glen, 10.ix.1924, AWS (NMI) (O'Connor, 1996: p. 256).

Ireland (Graham, 1969a: p. 695; Noyes, 1998: CD-ROM).

***Psilonotus hortensia* Walker, 1846**

WICKLOW: Glending, 19.viii.1954, MWRG (Graham Collection) (BMNH) (unpublished).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished); Walker, 1848: p. 105 from Mr Walker's collection).

***Psychophagus omnivorus* (Walker, 1835)**

WICKLOW: The Murrough, 1928, AAL (NMI) (O'Connor, 1996: p. 256).

***Pteromalus* (*Pteromalus*) *apum* (Retzius in Degeer, 1783)**

WEXFORD: Clone, 14.vii.1929, AWS (NMI) (O'Connor, 1996: p. 256).

***Pteromalus* (*Pteromalus*) *procerus* Graham, 1969**

DUBLIN: Gollierstown, 2♀♀ (paratypes) 1.ix.1954, AWS (Graham Collection) (Graham,

1969a: p. 494).

Ireland (Noyes, 1998: CD-ROM).

***Pteromalus* (*Pteromalus*) *squamifer* Thomson, 1878**

KERRY: Derrynane, ♂ 7.ix.1965, RRA (Askew Collection).

New to Ireland.

***Pteromalus* (*Habrocytus*) *albipennis* Walker, 1835**

Ireland (Graham, 1969a: p. 547; Noyes, 1998: CD-ROM).

***Pteromalus* (*Habrocytus*) *berylii* Walker, 1835**

DUBLIN: Glenasmole, 29.vi.1945, AWS (Graham Collection) (BMNH).

New to Ireland.

***Pteromalus* (*Habrocytus*) *cardui* (Erdös, 1953)**

WICKLOW: Murrough, 25.viii.1955, AWS (Graham Collection) (BMNH); no locality, 30.viii.1927, JNH (Graham Collection) (BMNH).

New to Ireland.

***Pteromalus* (*Habrocytus*) *cerealellae* (Ashmead, 1902)**

Northern Ireland (O'Farrell and Butler, 1948: pp 380 and 382 as *Habrocytus*, was found in Plate maize on two ships, but was not recorded ashore. Considered an introduced species which did not appear to have established itself. Parasitic on *Sitotroga* (Coleoptera: Curculionidae)).

***Pteromalus* (*Habrocytus*) *chlorospilus* (Walker, 1834)**

Ireland (Graham, 1969a: p. 524; Noyes, 1998: CD-ROM).

***Pteromalus* (*Habrocytus*) *conopidarum* (Bouček, 1961)**

DOWN: Strangford Lough, 31.vii.1962, AWS (Graham Collection) (BMNH); DUBLIN: Swords Estuary, 26.viii.1954, AWS (Graham Collection) (BMNH).

New to Ireland.

***Pteromalus* (*Habrocytus*) *elevatus* (Walker, 1834)**

KILDARE: Landenstown, 15.viii.1954 (Graham Collection) (BMNH) (unpublished).

WATERFORD: Tramore, on waste ground, ♂♂ ♀♀ emerged 1-14.vii.1997 from galled heads of knapweed *Centaurea* collected on 29.v.1997 and infested with *Urophora jaceana* (Hering) (Diptera: Tephritidae), JPOC (O'Connor, 2000c: 54).

***Pteromalus* (*Habrocytus*) *microps* (Graham, 1969)**

DUBLIN: Swords Estuary, ♂ 2♀♀ (paratypes) 26.viii.1954, AWS; DOWN: Benagh, ♀ (paratype) 1.vii.1957, AWS; Glasdrumman, 2♀♀ (holotype, paratype) 21.viii.1956, AWS (all Graham Collection) (Graham, 1969a: p. 558).

Ireland (Noyes, 1998: CD-ROM).

***Pteromalus* (*Habrocytus*) *musaeus* Walker, 1844**

WICKLOW: Bellevue Estate, 30.viii.1933, AWS (NMI) (O'Connor, 1996: p. 256).

[Ireland (Scannell, 1992: p. 175 parasitizing the dipteran *Terellia serratula* (L.) (Diptera: Tephritidae), J. Byrne and E. Dowling. It is uncertain if this record refers to *P. musaeus*, *P. elevatus* or some other chalcid as no voucher material was retained).]

***Pteromalus* (*Habrocytus*) *ochrocerus* (Thomson, 1878)**

CAVAN: Farrinseer, 13.v.1934, RCF (Graham Collection) (BMNH).

New to Ireland.

***Pteromalus* (*Habrocytus*) *ormenus* Walker, 1839**

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 269).

Ireland (Graham, 1969a: p. 524 as *Habrocytus*, Irish syntypes (2♂♂) of *Pteromalus ormenus* bearing a small, green ticket (indicating Irish origin). One selected as lectotype (BMNH); Noyes, 1998: CD-ROM).

***Pteromalus* (*Habrocytus*) *tripolii* (Graham, 1969)**

DUBLIN: North Bull (Island), several ♀♀ (paratypes) 13.viii.1962, collected in the salt-marsh, BH (Graham Collection); Swords Estuary, 3♀♀ (paratypes) 26.viii.1954, AWS (Graham Collection) (BMNH) (Graham, 1969a: p. 552); WEXFORD: Wexford, 25.vii.1925, JNH (Graham Collection) (BMNH) (unpublished); WICKLOW: The Murrough, 2♀♀ (paratypes) 25.viii.1955, AWS, (Graham, 1969a: p. 552 sea aster *Aster tripolium* L....is probably the main host-plant).

Ireland (Noyes, 1998: CD-ROM).

***Pteromalus* (*Habrocytus*) *vibulenus* (Walker, 1839)**

DOWN: Holywood, AHH (Walker, 1839a: p. 206 as *Ormocerus*); DUBLIN: near Portrane, coast, 20.vii.1950, AWS (Graham Collection) (BMNH); WICKLOW: Bray Head, coast south of, 16.ix.1954, AWS (Graham Collection) (BMNH) (both unpublished). Ireland (Graham,

1969a: p. 525; Noyes, 1998: CD-ROM).

***Rhopalicus tutela* (Walker, 1836)**

DUBLIN: St Anne's, Clontarf, 15.viii.1924, EOM (NMI) (O'Connor, 1996: p. 256).

Ireland (Walker, 1836: p. 15 as *Cheiropachus*. Mr Haliday; Noyes, 1998: CD-ROM).

***Sceptrothelys grandiclava* (Walker, 1835)**

DUBLIN: Ireland's Eye, ♂ ♀ 30.vii.1941, AWS (Graham, 1956: p. 91); KERRY: Killarney, Long Range, 14.ix.1981, swept from lake-side vegetation, JPOC (NMI) (O'Connor *et al.*, 1989: p. 70).

***Spaniopus dissimilis* Walker, 1833**

Ireland (Graham, 1969a: p. 705; Bouček, 1972: p. 313; Noyes, 1998: CD-ROM).

***Spaniopus polyspilus* Graham, 1969**

Ireland (Graham, 1969a: p. 707; Noyes, 1998: CD-ROM).

***Sphegigaster brevicornis* (Walker, 1833)**

KILDARE: Grand Canal, ♂ 12.vi.1954, AWS (Graham, 1969a: p. 135).

Ireland (Graham, 1987a: p. 79; Noyes, 1998: CD-ROM).

***Sphegigaster pallicornis* (Spinola, 1808)**

synonym *Sphegigaster flavicornis* (Walker, 1833)

Ireland (Graham, 1969a: p. 136 as *Sphegigaster flavicornis*; Noyes, 1998: CD-ROM as *Sphegigaster pallicornis*).

***Stenomalina dives* (Walker, 1835)**

DONEGAL: (East): Finner, ♀ 11.viii.1938 AWS; DUBLIN: Glenasmole, 27.iii.1943, AWS (NMI) (unpublished); same locality, ♀ 17.viii.1959, AWS; Harold's Cross, 28.vii.1932, in tram, AWS (NMI) (unpublished); The North Bull (Island), ♀ 25.viii.1943, EOM; KILDARE: Royal Canal, ♀ 15.viii.1943 and ♀ 29.viii.1943, AWS; LAOIS (Queen's County, Co. Leix): Woodbrook, 13.vii.1950, MWRG (all other records from Graham and Claridge, 1965: p. 277).

Ireland (Graham, 1969a: p. 608; Noyes, 1998: CD-ROM).

***Stenomalina epistena* (Walker, 1835)**

WICKLOW: Athdown, ♀ 13.viii.1954, MWRG; Glending, ♀ 19.viii.1954, MWRG; The Slade of Saggart 2♂♂ ♀ 20.viii.1954, MWRG (all Graham and Claridge, 1965: p. 282).

Ireland (Graham, 1969a: p. 610; Noyes, 1998: CD-ROM).

***Stenomalina favorinus* (Walker, 1839)**

Ireland (Graham, 1969a: p. 608; Noyes, 1998: CD-ROM).

***Stenomalina gracilis* (Walker, 1834)**

synonym *Pteromalus thessalus* Walker, 1839

DOWN: Tullybrannigan, 26.ix.1956 and 31.iii.1957, AWS (Graham Collection) (BMNH) (unpublished); DUBLIN: The Slade of Saggart, 6.xii.1936, AWS (NMI) (O'Connor, 1996: p. 257).

Ireland (Walker, 1839a: p. 268 as *Pteromalus thessalus*; Noyes, 1998: CD-ROM *Stenomalina thessalus*).

***Stenomalina illudens* (Walker, 1836)**

DONEGAL: Fairies Bridges, 26.viii.1932, AWS (NMI) (O'Connor, 1996: p. 257); DOWN: Mourne Wood, ♀ 29.vi.1988, swept from leaves of sycamore *Acer pseudoplantus* in deciduous woodland, RN (Nash, 1989: p. 73); DUBLIN: Ireland's Eye, 30.vii.1941, AWS (NMI); MEATH: Meath coast, 6.x.1926, AWS (NMI) (both O'Connor, 1996: p. 257).

Ireland (Noyes, 1998: CD-ROM).

***Stinoplus etearchus* (Walker, 1848)**

DUBLIN: Rush, ♀♀ 1.vii.1923, reared from cat's ear *Hypochoeris radicata* L. together with several *Phanacis hypochoeridis* (Kieffer) (Hymenoptera: Cynipidae) which may have been their host, AWS (Graham, 1969a: p. 693); WATERFORD: Tramore, back strand, ♀ emerged 15.vi.1999 from galls of *P. hypochoeridis* in *H. radicata* collected on 9.iv.1999, JPOC (NMI) (unpublished).

Ireland (Noyes, 1998: CD-ROM).

***Toxeuma fuscicorne* Walker, 1833**

Ireland (Graham, 1969a: p. 147; Noyes, 1998: CD-ROM).

***Toxeuma paludum* Graham, 1959**

Ireland (Graham, 1969a: p. 148; Noyes, 1998: CD-ROM).

***Trichomalopsis acuminatus* (Graham, 1969)**

KILDARE: Newbridge, marsh near, ♂ ♀ (paratypes) 22.vi.1953, AWS (Graham Collection) (Graham, 1969a: p. 764 as *Eupteromalus*).

Ireland (Noyes, 1998: CD-ROM).

***Trichomalopsis fucicola* (Walker, 1835)**

DOWN: Murlough, 12.vii.1964, AWS (USNM); KERRY: Dunkerron, 5.vii.1935, in seaweed, AWS (NMI); LEITRIM: Tullaghan, 7.x.1937, in seaweed, AWS (NMI) (O'Connor, 1996: p. 255 as *Eupteromalus*).

Ireland (Graham, 1969a: p. 753 as *Eupteromalus*, widely distributed on the coast, associated with seaweed (*Fucus* sp.); Noyes, 1998: CD-ROM).

***Trichomalopsis hemiptera* (Walker, 1835)**

Ireland (Graham, 1969a: p. 773 as *Eupteromalus*, it appears to be one of the commonest species of the genus; Noyes, 1998: CD-ROM).

***Trichomalopsis littoralis* (Graham, 1969)**

DUBLIN: Portrane, coast at, 2♀♀ (paratypes) 20.vii.1950, AWS; same locality, ♀ (paratype) 11.viii.1954, MWRG; WICKLOW: The Murrough, near Newcastle, ♀ (paratype) 30.v.1954 and ♀ (paratype) 25.v.1955, AWS (BMNH, Graham collection) (Graham, 1969a: pp 755-756 as *Eupteromalus*).

Ireland (Noyes, 1998: CD-ROM).

***Trichomalopsis pompilicola* (Graham, 1969)**

WICKLOW: Powerscourt, 9♀♀ (holotype, paratypes) 3.vi.1937, bred from a cocoon of *Anoplius nigerrimus* (Scopoli) (Hymenoptera: Pompilidae), AWS (OUM) (Graham, 1969a: p. 753 as *Eupteromalus*).

Ireland (Noyes, 1998: CD-ROM).

***Trichomalus bracteatus* (Walker, 1835)**

KILDARE: Kilkea Park, 27.viii.1933, AWS (NMI) (det. MWRG) (unpublished).

Ireland (Graham, 1969a: p. 726; Noyes, 1998: CD-ROM).

***Trichomalus campestris* (Walker, 1834)**

DUBLIN: Glenasmole, 11 and 28.x.1936, AWS (NMI); KERRY: Coral Strand near Sneem, ♀ 2.ix.1965, RRA (Askew Collection); LIMERICK: Glenefy, 11.ix.1943, AWS (NMI) (all unpublished).

Ireland (Graham, 1969a: p. 736 very common in the British Isles; Noyes, 1998: CD-ROM).

***Trichomalus fulvipes* (Walker, 1836)**

KERRY: Coral Strand near Sneem, ♀ 2.ix.1965, RRA (Askew Collection).

New to Ireland.

***Trichomalus gynetelus* (Walker, 1835)**

Ireland (Graham, 1969a: p. 725; Noyes, 1998: CD-ROM).

***Trichomalus helvipes* (Walker, 1834)**

TIPPERARY (South): Lough Curra, Galtees, 10.vi.1944, AWS (Graham Collection) (BMNH) (unpublished).

Ireland (Graham, 1969a: p. 732; Noyes, 1998: CD-ROM).

***Trichomalus lucidus* (Walker, 1835)**

Ireland (Graham, 1969a: p. 726; Noyes, 1998: CD-ROM).

***Trichomalus posticus* (Walker, 1834)**

KILDARE: Tankardstown, 30.iv.1934, AWS (Graham Collection) (BMNH) (unpublished).

Ireland (Graham, 1969a: p. 719; Noyes, 1998: CD-ROM).

***Trichomalus rufinus* (Walker, 1835)**

synonym *Trichomalus inops* (Walker, 1835)

KERRY: Coral Strand near Sneem, ♂ 2.ix.1965, RRA (Askew Collection); Derrynane, 2♂♂ ♀ 7.ix.1965 and ♂ 5♀♀ 9.ix.1965, RRA (Askew Collection) (all unpublished); WICKLOW: Deputy's Pass, 1.v.1932, AWS (NMI) (det. MWRG as *Trichomalus inops*) (unpublished).

Ireland (Graham, 1969a: p. 735 as *Trichomalus inops*; Noyes, 1998: CD-ROM as *Trichomalus inops*).

***Trichomalus statutus* (Förster, 1841)**

Ireland (Noyes, 1998: CD-ROM citing Dzhanokmen, 1978: p. 163).

****Trichomalus tenellus* (Walker, 1834)**

DUBLIN: Donabate, 15.ix.1935, AWS (Graham Collection) (BMNH).

New to Ireland.

***Trigonoderus princeps* Westwood, 1832**

KERRY (South): Blackstones Bridge, Glencar, 2♀♀ 7.vii.1934, on a bored stump, AWS (Stelfox, 1941: p. 338); WICKLOW: Clara, 13.v.1934, AWS (O'Connor, 1996: p. 257).

Ireland (Graham, 1993a: p. 110).

***Urolepis maritima* (Walker, 1834)**

synonym *Miscogaster stygne* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 201 as *Miscogaster stygne*; Graham, 1969a: p. 780 as *Miscogaster stygne*).
Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI); Graham, 1969a: p. 781; Hedqvist, 1978: p. 288; Ashe *et al.*, 1998: p. 25; Noyes, 1998: CD-ROM).

SPALANGIINAE HALIDAY, 1833

***Spalangia erythromera* Förster, 1850**

synonym *Spalangia umbellatarum* Förster, 1850
CARLOW: Kilcarry, 6.viii.1929, AWS (Graham Collection) (BMNH) (unpublished); DOWN: Tollymore Park, AWS (USNM) (O'Connor, 1996: p. 257); KERRY: Derrynane, ♀ 7.ix.1965, RRA (Askew Collection) (unpublished); KILDARE: Rye Water, 7.vii.1940, AWS (Graham Collection) (BMNH) (unpublished); MEATH: by the River Boyne below Trim, 18.viii.1937, George M. Stelfox (Stelfox, 1941: p. 338 as *Spalangia umbellatarum*; Graham Collection, BMNH); TIPPERARY: Aherlow, 10.ix.1943, AWS (NMI); WICKLOW: Killoughter, 3.ix.1933, AWS (NMI) (both O'Connor, 1996: p. 257); Woodend, 29.ix.1951, AWS (Graham Collection) (BMNH) (unpublished).

***Spalangia nigra* Latreille, 1805**

synonym *Spalangia hirta* Haliday, 1833
Ireland (Haliday, 1833: p. 335, tolerably abundant throughout both islands, in pastures and marshes; Graham, 1969a: p. 52 as *Spalangia hirta*. Haliday's collection (NMI) contains only one specimen actually labelled as *hirta*, a female which is indicated as Irish (Haliday's record states "Taken in England") and which does not fit the description).

****Spalangia subpunctata* Förster, 1850**

DUBLIN: Jobstown, 9.ix.1949, AWS (Graham Collection) (BMNH); SLIGO: Toberscanavan, 19.viii.1933, AWS (Graham Collection) (BMNH).
New to Ireland.

TETRACAMPIDAE FORSTER, 1856

Small green insects (0.8-3.3mm) whose biology is poorly understood. Known hosts are leaf-mining insects and insect eggs. Less than forty species have been described world-wide, with

only seven reported from Britain. Two species have been recorded from Ireland.

PLATYNOCHEILINAE BOUČEK, 1958

***Platynocheilus cuprifrons* (Nees, 1834)**

synonym *Stenocera derceto* Walker, 1839

DOWN: Holywood, near Belfast, AHH (Walker, 1839a: p. 276 as *Stenocera derceto*; Graham, 1963: p. 169); DUBLIN: North Bull, ♂ 31.vi.1955, AWS (Graham, 1963: p. 169).

Ireland (Bouček and Askew, 1968b: p. 6).

TETRACAMPINAE FORSTER, 1856

***Epiclerus temenus* (Walker, 1839)**

DUBLIN: North Bull (Island), ♂ 31.v.1955, AWS (Graham, 1963: p. 171).

TORYMIDAE WALKER, 1833

Small to large insects (1.1-7.5mm in length excluding ovipositor) (Figs 11 and 12). Including the ovipositor, the length can reach 16mm. They have elongate bodies which are often green, blue or yellow in colour and highly metallic. They are normally only weakly sculptured or quite smooth. Torymids are entomophagous or phytophagous. Some may be both, for example feeding in turn on the gall-causer and the gall tissue. World-wide, there are some 1,500 species with over 75 known from Great Britain. To-date, 32 species have been recorded from Ireland.

MEGASTIGMINAE THOMSON, 1876

***Megastigmus dorsalis* (Fabricius, 1798)**

KERRY: near Woodford, Killarney, emerged 20.vi.1993 from cynipid twig galls collected on 15.vi.1993, JPOC (NMI) (unpublished); TIPPERARY: Ballinacourty, ♀ 15.ix.1943, AWS (NMI); WEXFORD: Oaklands, ♂ 18.vi.1982, JMOC (NMI); WICKLOW: Clara, ♂ 4.ix.1938, AWS (NMI) (all O'Connor and Nash, in press, a).

***Megastigmus pictus* (Förster, 1841)** (Fig. 11)

DUBLIN: Lucan, ♀ 28.vi.1944, AWS (O'Connor and Nash, in press, a); WICKLOW: Knickeen, ♀ 2.vii.1950, MWRG (Bouček, 1970: p. 269).

FIGURE 11: *Megastigmus pictus* (Förster) (hind-wing not shown).

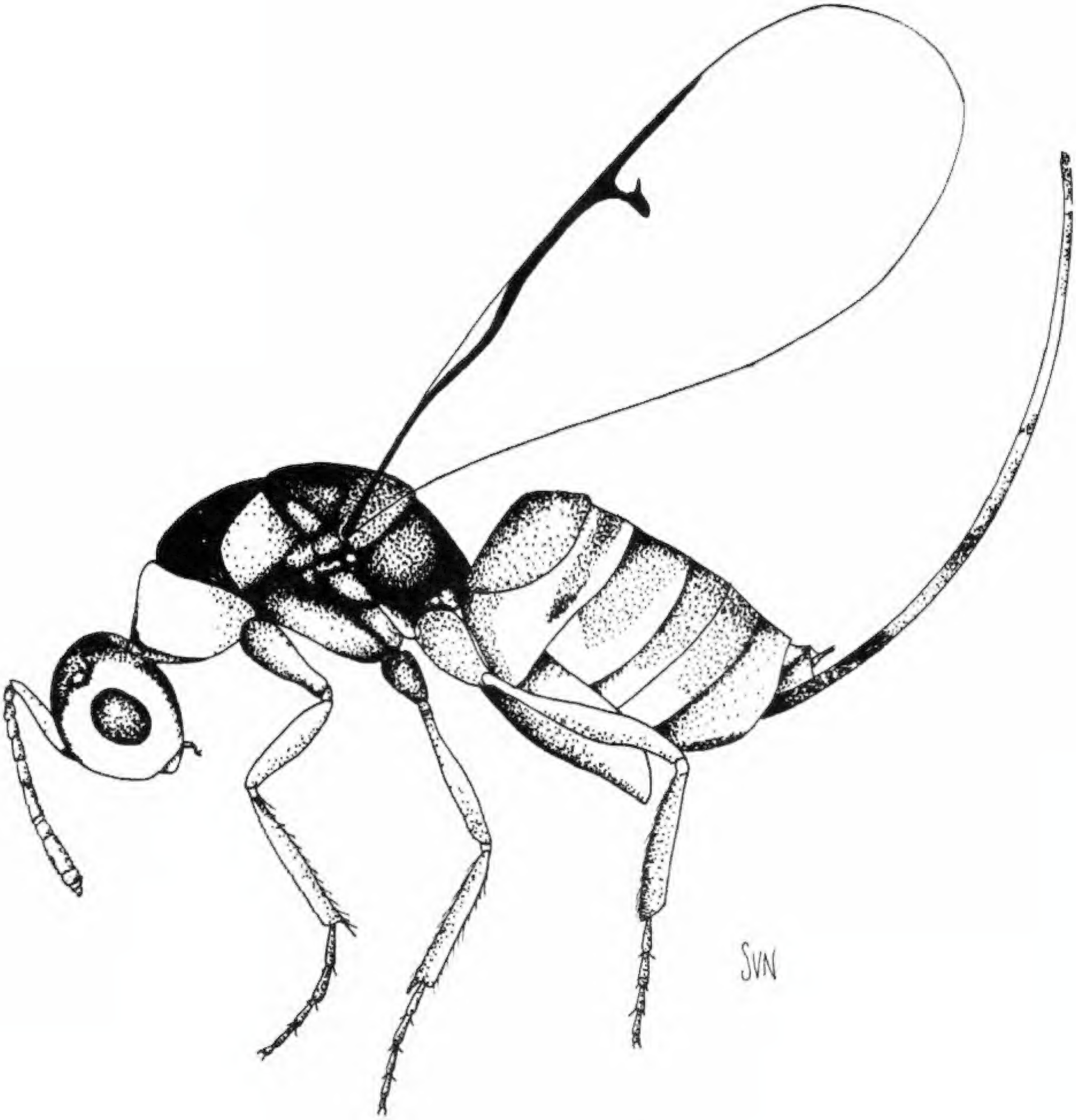
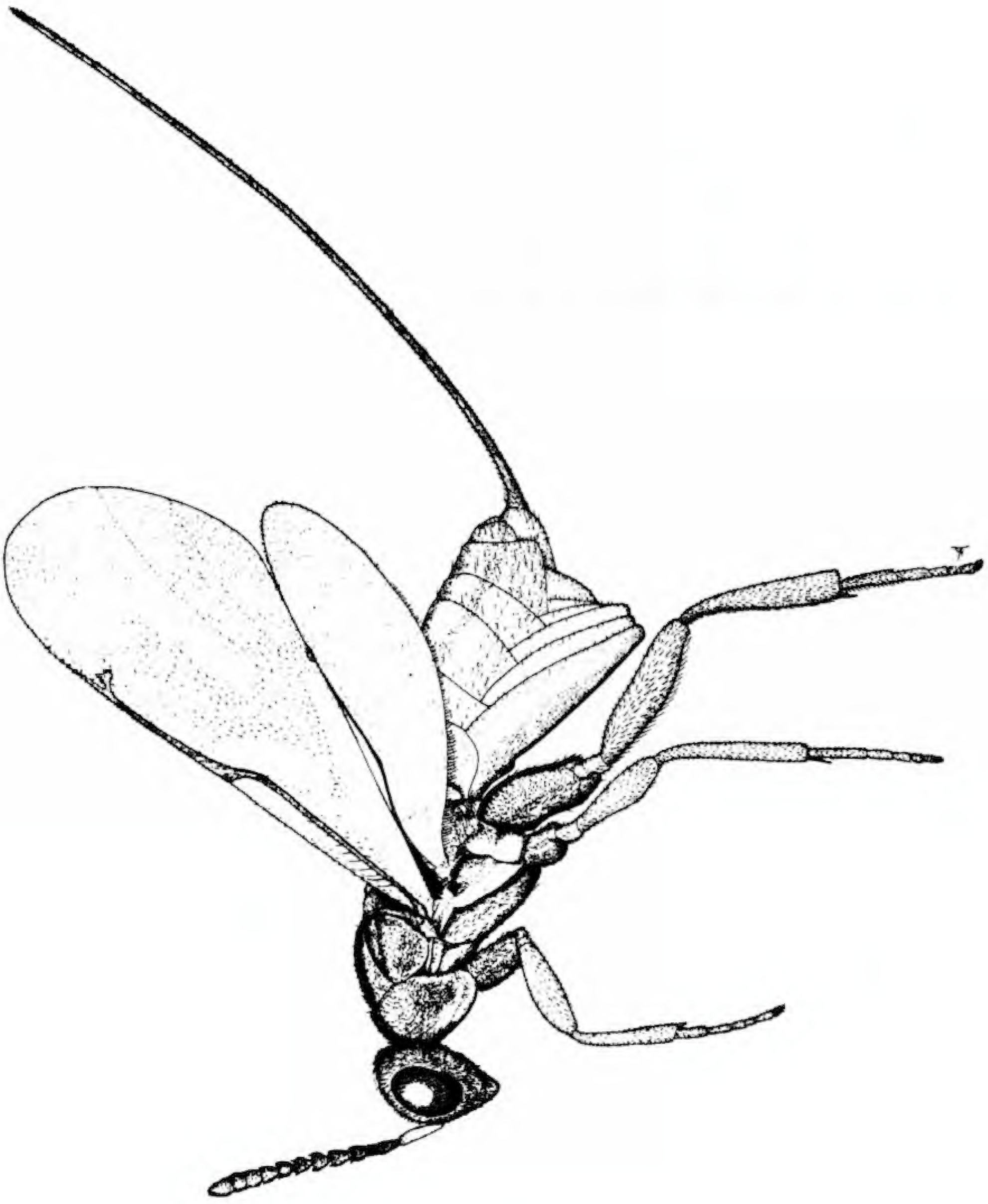


FIGURE 12: *Torymus varians* (Walker).



***Megastigmus pinus* Parfitt, 1857**

WEXFORD: Ballyhighland wood, ♂♂ ♀♀ 14.vi.1982, specimens were flying near or crawling about on bracken *Pteridium aquilinum* and other vegetation growing on both sides of a hundred-metre stretch of path running through a coniferous plantation, JMOC (NMI, BMNH, UM) (O'Connor and O'Connor, 1984: p. 102).

Ireland (Noyes, 1998: CD-ROM).

***Megastigmus spermotrophus* Wachtl, 1893**

DOWN: Donard Lodge, ♂ 16.v.1957, emerged from cones of Douglas fir *Pseudotsuga douglasii* Carr. (now *Pseudotsuga menziesii* (Mirb.) Franco), AWS (NMI); DUBLIN: Glenasmole, ♀ 17.vi.1942, AWS (NMI); WICKLOW: Powerscourt, 4♂♂ ♀ 29.iv.1921, from the cones of the Douglas fir *Pseudotsuga menziesii*, J. G. Reinhart (all O'Connor and Nash, in press, a).

[*Megastigmus strobilobius* Ratzeburg, 1848

WICKLOW: no locality, 2♀♀ June 1909, from silver fir *Abies*, A. C. Forbes (Carpenter, 1910: p. 22 and plate IIb. Mr Forbes believed the insects to belong to the above species).]

***Megastigmus suspectus* Borries, 1895**

DUBLIN: Saggart, ♀ 20.vi.1943, AWS (Bouček, 1970: p. 270).

TORYMINAE WALKER, 1833

***Cryptopristus caliginosus* (Walker, 1833)**

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

New to Ireland.

***Torymus affinis* (Fonscolombe, 1832)**

synoynm *Syntomaspis apicalis* (Walker, 1833)

DUBLIN: Phoenix Park, near Castleknock gate, ♂♂ ♀♀ reared 20-23.xii.1992 from a gall of *Biorhiza pallida* (Olivier) (Hymenoptera: Cynipidae) collected on 31.x.1992, JPOC (NMI, UM) (O'Connor and Nash, in press, b).

***Torymus amurensis* (Walker, 1874)**

Ireland (Graham and Gijswijt, 1998: p. 51).

***Torymus angelicae* (Walker, 1836)**

DOWN: Holywood, found on wild angelica *Angelica sylvestris*, AHH (Walker, 1836: p. 26 as *Callimone*).

Ireland (Five Irish ♀♀, det. MWRG, Haliday Collection (NMI); Graham and Gijswijt, 1998: p. 51 refer to the five Irish specimens as syntypes).

***Torymus armatus* Boheman, 1834**

Ireland (Two Irish specimens, det. MWRG as *Diomorus*, Haliday Collection (NMI)).

New to Ireland.

***Torymus arundinis* (Walker, 1833)**

WEXFORD: Curracloe, 2♀♀ 9.vi.1982, swept in the alder *Alnus* marsh beside the sand-dunes, JPOC (det. MWRG) (NMI); WICKLOW: Maherabeg, ♀ 25.vii.1946, swept, AWS (det. MWRG) (NMI) (O'Connor and Nash, in press, b).

Ireland (Two Irish specimens, det. MWRG, Haliday Collection (NMI)).

***Torymus auratus* (Müller, 1764)**

synonym *Torymus nigricornis*: Boheman, 1834 misidentification

MAYO: Belclare, July, JNH; Castlebar, July, JNH; Clare Island, on the cliffs, JNH (Morley, 1911: p. 17 as *Torymus nigricornis* Walker).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI) (unpublished)).

***Torymus basalis* (Walker, 1833)**

Ireland (Graham and Gijswijt, 1998: p. 61).

***Torymus bedeguaris* (Linnaeus, 1758)**

KILDARE: Oldtown House (Old Town Ho.), 10.viii.1952, AWS (Graham Collection) (BMNH) (unpublished); WICKLOW: Manor Kilbride, ♂♂ ♀♀ reared 2-19.xii.1992 from a gall of *Diplolepis rosae* (L.) (Hymenoptera: Cynipidae) on rose *Rosa*, SW (NMI) (O'Connor and Nash, in press, b).

***Torymus chlorocopes* Boheman, 1834**

DOWN: Newcastle, ♀ 24.ix.1958, on the foliage of grey willow *Salix cinerea*, MWRG (Graham, 1969b: p. 65).

***Torymus chloromerus* (Walker, 1833)**

MAYO: Clare Island, ♀ June 1909, JNH (Morley, 1911: p. 17).

***Torymus cingulatus* Nees, 1834**

CLARE: Black Head, ♂ emerged 21.vii.1999 from gall of *Liposthetus latreillei* (Kieffer) (Hymenoptera: Cynipidae) collected 4.vi.1999 on ground ivy *Glechoma hederacea* L., JPOC (NMI) (O'Connor, 2000d: p. 87).

***Torymus confinis* (Walker, 1833)**

synonym *Torymus urticae* (Perris, 1840)

DUBLIN: Castleknock, 2♀♀ reared 1-14.viii.1999 from the galls of *Dasineura urticae* (Perris) (Diptera: Cecidomyiidae) collected on common nettle *Urtica dioica* L. in a suburban garden, 30.vii.1999, JPOC (NMI) (O'Connor and Nash, in press, b); Clareville, garden, 29.vii.1955, AWS (Graham Collection) (BMNH) (unpublished).

***Torymus cyaneus* Walker, 1847**

KILDARE: Donadea, 2♀♀ reared 6.v.1993 from a gall of *Cynips longiventris* Hartig (Hymenoptera: Cynipidae) collected on oak *Quercus*, 4.ii.1993, JPOC (NMI) (O'Connor and Nash, in press, b).

***Torymus erucarum* (Schrank, 1781)**

MAYO: Clare Island; Carrowmore Lough, on mainland, July, CM (both Morley, 1911: p. 17).

***Torymus flavipes* (Walker, 1833)**

synonym *Torymus auratus* (Geoffroy *in* Fourcroy, 1785)

WEXFORD: Curracloe, 2♀♀ 12.vi.1982, swept on the sand-dunes, JPOC and MAOC (det. MWRG as *Torymus auratus*) (NMI); WICKLOW: Glendalough, ♀ 8.xi.1981, swept, JPOC (det. MWRG as *Torymus auratus*) (NMI) (both O'Connor and Nash, in press, b).

***Torymus formosus* (Walker, 1833)**

synonym *Torymus amoenus* Boheman, 1834

Dublin: Mount Anvil, ♀ reared 30.xii.1992 from a gall of *Andricus quercusradicis* (Fabr.) (Hymenoptera: Cynipidae) collected on oak *Quercus* on 17.xi.1992, SW (NMI) (O'Connor and Nash, in press, b).

Ireland (Six Irish specimens, det. MWRG as *Torymus amoenus*, Haliday Collection (NMI) (unpublished)).

****Torymus galii* Boheman, 1834**

WICKLOW: The Murrough, 13.vi.1948, AWS (Graham Collection) (BMNH).

New to Ireland.

***Torymus geranii* (Walker, 1833)**

synonym *Torymus cynipedis*: Boheman, 1834 misidentification

Donegal: Knather, ♀ swept 27.viii.1932, AWS (det. MWRG as *Cynips cynipedis* Boheman, 1834) (O'Connor and Nash, in press, b).

****Torymus laetus* (Walker, 1836)**

synonym *Torymus purpurascens* Boheman, 1834 misidentification

Ireland (Irish specimen, det. MWRG as *Callimomus purpurascens*, Haliday Collection (NMI)).

New to Ireland.

***Torymus microcerus* (Walker, 1833)**

synonym *Torymus liogaster* Thomson, 1876

WICKLOW: Buckroney, 15.vi.1949, AWS (Graham Collection) (BMNH) (unpublished).

Ireland (Three Irish specimens, det. MWRG as *Torymus liogaster*, Haliday Collection (NMI) (unpublished); Graham and Gijswijt, 1998: p. 122).

***Torymus nobilis* Boheman, 1834**

Ireland (Graham and Gijswijt, 1998: p. 127).

***Torymus notatus* (Walker, 1833)**

Dublin: Ashtown Castle, Phoenix Park, ♀ reared 29.iv.1992, from a cynipid bud gall collected on oak *Quercus* on 26.iv.1992, JPOC (NMI); near the Phoenix Monument, Phoenix Park, ♀ collected 3.v.1993 on a gall of *Andricus curvator* Hartig (Hymenoptera: Cynipidae) on oak *Quercus*, JPOC (NMI) (both O'Connor and Nash, in press, b).

***Torymus paludum* Graham and Gijswijt, 1998**

ANTRIM: Lough Neagh at Selshan, ♀ (paratype) 26.vi.1957, MWRG (BMNH) (Graham and Gijswijt, 1998: p. 129).

Ireland (Graham and Gijswijt, 1998: p. 129).

***Torymus pulchellus* Thomson, 1876**

Ireland (Graham and Gijswijt, 1998: p. 136).

***Torymus varians* (Walker, 1833)** (Fig. 12).

Dublin: Merrion Square, ♀ 25.vi.1945, swept, AWS (det MWRG) (NMI) (O'Connor and Nash, in press, b).

†

Ireland (Four Irish specimens, det. MWRG, Haliday Collection (NMI)).

***Torymus ventralis* (Fonscolombe, 1832)**

Tipperary: near Ballina, ♂ 27.v.1984, swept in a small wood beside the Kilmastulla River, JPOC (det. MWRG) (NMI) (O'Connor and Nash, in press, b).

Ireland (Irish specimen, det. MWRG, Haliday Collection (NMI)).

TRICHOGRAMMATIDAE HALIDAY, 1851

Minute to small insects (0.3-1.2mm in length excluding ovipositor; with ovipositor up to 1.8mm). They are squat to elongate with the colour varying from yellow or orange to dark brown, never metallic. Trichogrammatids are primary, solitary or gregarious endoparasitoids of the eggs of other insects. World-wide, there are some 532 described species with 29 reported from Great Britain. To-date, only three species are known from Ireland.

***Chaetostricha dimidiata* Walker, 1851**

DOWN: Holywood, AHH (Walker, 1851: p. 212).

Ireland (Noyes, 1998: CD-ROM).

***Oligosita collina* Walker, 1851**

DOWN: near Belfast, on a mountain heath, AHH (Walker, 1851: p. 212).

Ireland (Noyes, 1998: CD-ROM).

***Trichogramma evanescens* Westwood, 1833**

synonym *Trichogramma vitripennis* Walker, 1851

DOWN: Holywood, AHH (Walker, 1851: p. 212 as *Trichogramma vitripennis*).

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APPENDIX 1. Haliday plates of Chalcidoidea (1840-1842)

From 1840 to 1842, 15 plates of figures illustrating the genera of Chalcidoidea were published in volume one of Newman's *The Entomologist*. These plates were engraved by Mr Ingall from drawings by A. H. Haliday. Interestingly, Haliday's name did not appear on the plates. Instead, his authorship is indicated on each by a shamrock. The first appeared in May 1841 and the editor wrote on the inside of the rear cover of the journal "To SUBSCRIBERS. It is my pleasing duty to announce a donation from Mr. Walker, of fifteen highly finished engravings, by Mr. Ingall, from drawings by Mr. Haliday. This valuable gift will, I am sure, be as acceptable to my subscribers as to myself, and claims the best thanks of all the lovers of Entomology". Because of their historical interest, the plates are reproduced here although only some of the drawings are based on Irish specimens and/or species. An explanation of the plates is provided in Table 1, with the modern names and the relevant family given in brackets. The drawings were beautifully executed and several of the illustrations were used on the front cover of *A bibliography of Irish entomology* by Ryan, O'Connor and Beirne (1984). Original copies of *The Entomologist* are extremely rare but a facsimile of volume one was reprinted in 1967 by Wm. Dawson and Sons Ltd., and E. W. Classey Ltd, London. Graham (1987) discovered unbound issues of volume one and was able to establish the dates of publication of most of the plates and these are given below. Where necessary, the modern names of the species are given with the original text for each plate.

The dates of the plates are:- Plate A (May 1841); Plate B (June 1841); Plate C (July 1841); D (August 1841); E (September 1841); F (October 1841); G (November 1841); H (December 1841); J (January 1842); K (February 1842); L (March 1842); N (June 1842).

TABLE 1. An explanation of the plates. Modern names and the relevant family are given in brackets. In the original, a legend was given for the non-existent Plate I. This has been corrected here to J.

Plate A (Plate 5 of the present work)

1. *Merisus splendidus*, *fem*. Ent. Mag. ii. 166. a. Antenna; b. Prothorax.

(*Merisus splendidus* Walker, 1834 (Pteromalidae))

2. *Rhaphitelus maculatus*, *fem.* Ent. Mag. ii. 178. a. Antenna.
(*Rhaphitelus maculatus* Walker, 1834 (Pteromalidae))
3. *Notanisus versicolor*, *fem.* Ent. Mag. iv. 352. a. Antenna.
(*Notanisus versicolor* Walker, 1837 (Pteromalidae))
4. *Eunotus cretaceus*, *mas*. Ent. Mag. ii. 297. a. Antenna.
(*Eunotus cretaceus* Walker, 1834 (Pteromalidae))

Plate B (Plate 6 of the present work)

1. *Systasis encyrtoides*, *fem.* Ent. Mag. ii. 296. a. Antenna.
(*Systasis encyrtoides* Walker, 1834 (Pteromalidae))
2. *Psilonotus Adamas*, *fem.* Ent. Mag. ii. 179. a. Antenna.
(*Psilonotus adamas* Walker, 1834 (Pteromalidae))
3. *Metopon atrum*, *fem.* Ent. Mag. ii. 302. a. Antenna.
(*Metopon atrum* Walker, 1834 = *Psilocera obscura* Walker, 1833 (Pteromalidae))
4. *Eutelus immaculatus*, *mas*. Ent. Mag. ii. 357. a. Antenna.
(*Eutelus immaculatus* Walker, 1834 = *Mesopolobus amaenus* (Walker, 1834) (Pteromalidae))

Plate C (Plate 7 of the present work)

1. *Merismus flavicornis*, *fem.* Ent. Mag. i. 377. a. Antenna.
(*Merismus flavicornis* Walker, 1833 = *Sphegigaster pallicornis*
(Spinola, 1808) (Pteromalidae))
2. *Coruna clavata*, *mas*. Ent. Mag. i. 379. a. Antenna. b. Antenna of female.
(*Coruna clavata* Walker, 1833 (Pteromalidae))
3. *Prosodes ater*, *fem.* Ent. Mag. i. 374. a. Antenna.
(*Prosodes ater* Walker, 1833 = *Cryptoprymna atra* (Walker, 1833) (Pteromalidae))
4. *Merostenus Phedyma*, *mas*. Ent. Mag. iv. 344. a. Antenna.
(*Merostenus phedyma* Walker, 1837 (Eupelmidae))

Plate D (Plate 8 of the present work)

1. *Toxeuma Ericae*, *fem.* Ent. Mag. i. 379. a. Antenna.

(*Toxeuma ericae* Walker, 1833 = *Toxeuma fuscicorne* Walker, 1833 (Pteromalidae))

2. *Gastrancistus laticornis*, *fem*. Ent. Mag. ii. 174. a. Antenna.

(*Gastrancistus laticornis* Walker, 1834 (Pteromalidae))

3. *Psilocera obscura*, *mas*. Ent. Mag. i. 374. a. Antenna.

(*Psilocera obscura* Walker, 1833 (Pteromalidae))

4. *Prosopon montanum*, *mas*. Ent. Mag. iv. 356. a. Antenna.

(*Prosopon montanum* Walker, 1837 = *Pegopus inornatus* (Walker, 1834) (Pteromalidae))

Plate E (Plate 9 of the present work)

1. *Trigonoderus obscurus*, *fem*. Ent. Mag. iv. 21. 1a. Antenna.

(*Trigonoderus obscurus* Walker, 1836 = *Trigonoderus princeps* Westwood, 1832 (Pteromalidae))

2. *Micromelas pyrrhogaster*, *mas*. Ent. Mag. i. 465. 4a. Antenna.

(*Micromelus pyrrhogaster* Walker, 1833 = *Callitula pyrrhogaster* (Walker, 1833) (Pteromalidae))

3. *Ectroma fulvescens*, *fem*. Ent. Mag. v. 115. 2a. Antenna.

(*Ectroma fulvescens* Westwood, 1833 (Encyrtidae))

4. *Ormocerus maritimus*, *fem*. Ent. Mag. ii. 169. 3a. Antenna.

(*Ormocerus maritimus* Walker, 1834 = *Urolepis maritima* (Walker, 1834) (Pteromalidae))

Plate F (Plate 10 of the present work)

1. *Notaspis formiciformis*, *mas*. Ent. Mag. ii. 38. a. Head above. b. Thorax. c. Abdomen.

(*Notaspis formiciformis* Walker, 1834 = *Notaspidium formiciforme* (Walker, 1834) (Chalcididae))

2. *Eupelmus Degeeri*, *fem*. Ent. Mag. iv. 361. a. Antenna.

(*Eupelmus degeeri* Dalman, 1820 = *Eupelmus vesicularis* (Retzius, 1783) (Eupelmidae))

3. *Priomerus pachymerus*, *fem*. Ent. Mag. i. 118. a. Head in front. b. Antenna, 2 - 4th joints.

(*Priomerus pachymerus* Walker, 1833 = *Podagrion pachymerum* (Walker, 1833) (Torymidae))

Plate G (Plate 11 of the present work)

1. *Hetroxys scenicus*, *fem.* Ent. Mag. iv. 10. a. Antenna.

(*Hetroxys scenicus* Walker, 1836 = *Plutothrix bicolorata* (Spinola, 1808) (Pteromalidae))

2. *Pteromalus latus*? *fem.* Ent. Mag. ii. 481. a. Antenna.

(*Pteromalus latus* Walker, 1835 = *Schizonotus latus* (Walker, 1835) (Pteromalidae))

3. *Isosoma flavicolle*, *fem.* Ent. Mag. ii. 153.

(*Isosoma flavicolle* Walker, 1834 = *Tetramesa fulvicollis* (Walker, 1832) (Eurytmidae))

4. *Systole platyptera*, *fem.* Ent. Mag. ii. 153. a. Antenna. b. Antenna of male.

(*Systole platyptera* Walker, 1834 = *Bruchophagus platypterus*
(Walker, 1834) (Eurytomidae))

Plate H (Plate 12 of the present work)

1. *Encydnus strigosus*, *fem.* Ent. Mag. iv. 364. a. Antenna.

(*Encydnus strigosus* Nees, 1834 = *Ericydnus strigosus* (Nees, 1834) (Encyrtidae))

2. *Encyrtus corniger*, *mas*. Ent. Mag. v. 114. a. Antenna.

(*Encyrtus corniger* Walker, 1838 = *Eusemion cornigerum* (Walker, 1838) (Encyrtidae))

3. *Encyrtus urocerus*, *fem.* (*Cerchysius*). Ent. Mag. iv. 439.

(*Encyrtus urocerus* Dalman, 1820 = *Cerchysius subplanus* (Dalman, 1820) (Encyrtidae))

4. *Encyrtus mirabilis*, (*Cerapterocerus*). Ent. Mag. v. 114. a. Forewing.

(*Encyrtus mirabilis* (Westwood, 1833) = *Cerapterocerus mirabilis* Westwood, 1833
(Encyrtidae))

Plate J (Plate 13 of the present work)

1. *Dipara petiolata*, *mas*. Ent. Mag. i. 373.

(*Dipara petiolata* Walker, 1833 (Pteromalidae))

2. *Semiotus varians*, *fem.* Ent. Mag. ii. 293. a. Antenna.

(*Semiotus varians* Walker, 1834 = *Semiotellus mundus* (Walker, 1834) (Pteromalidae))

3. *Syntomopus thoracicus*, *fem.* Ent. Mag. i. 372. a. Antenna.

(*Syntomopus thoracicus* Walker, 1833 (Pteromalidae))

4. *Torymus caliginosus*, *mas*. Ent. Mag. i. 118.

(*Torymus caliginosus* Walker, 1833 = *Cryptopristus caliginosus* (Walker, 1833) (Torymidae))

5. *Diomorus nobilis*, *mas*, hind leg. Ent. Mag. ii. 159.

(*Diomorus nobilis* Walker, 1834 = *Diomorus armatus* (Boheman, 1834) (Torymidae))

Plate K (Plate 14 of the present work)

1. *Coecophagus scutellaris*. Mon. Chal. i. 6. a. Antenna.

(*Coecophagus scutellaris* (Nees, 1834) = *Coccophagus lycimnia* (Walker, 1839) (Aphelinidae))

2. *Aphelinus basalis*, *mas*. Mon. Chal. i. 2. a. Antenna of female.

(*Aphelinus basalis* (Westwood, 1833) = *Aphelinus abdominalis* (Dalman, 1820) (Aphelinidae))

3. *Thusanus ater*, *mas*. Ann. Nat. Hist. iv. 234. a. Antenna. b. Ditto of fem. c. Middle tibia and tarsus.

(*Thysanus ater* Walker, 1840 (Signiphoridae))

4. *Trichogramma evanescens*, *mas*. Mon. Chal. i. 13. a. Antenna. b. Hind tarsus. c. Fore wing. d. Hind wing.

(*Trichogramma evanescens* Westwood, 1833 (Trichogrammatidae))

Plate L (Plate 15 of the present work)

1. *Eulophus fulvicollis*, *mas*, (*Hemiptarsenus*). Mon. Chal. i. 190.

(*Eulophus fulvicollis* (Westwood, 1833) = *Hemiptarsenus fulvicollis* Westwood, 1833 (Eulophidae))

2. *Cirrospilus pulchellus*, *mas*, (*Stenomesius*). Mon. Chal. i. 193.

(*Cirrospilus pulchellus* (Westwood, 1833) = *Stenomesius rufescens* (Retzius, 1783) (Eulopidae))

3. *Cirrospilus caudatus*, *fem*. (*Aprostocetus*). Mon. Chal. i. 324.

(*Cirrospilus caudatus* (Westwood, 1833) = *Aprostocetus caudatus* Westwood, 1833 (Eulophidae))

4. *Entedon Amylcas*, (*Derostenus*). Mon. Chal. i. 42.

(*Entedon amyleas* Walker, 1839 = *Pediobius metallicus* (Nees, 1834) (Eulophidae))

Plate M (Plate 16 of the present work)

1. *Eulophus albiventris*, *mas*. Mon. Chal. i. 173. a. Antenna.

(*Eulophus albiventris* (Spinola, 1811) = *Euplectrus bicolor* (Swederus, 1795) (Eulophidae))

2. *Cirrospilus Attalus*, *fem.* Ann. Nat. Hist.

(*Cirrospilus attalus* Walker, 1839 = *Tetrastichus miser* (Nees, 1834) (Eulophidae))

3. *Pteroptrix Menes*, *fem.* Mon. Chal. i. 18. a. Antenna.

(*Pteroptrix menes* Walker, 1839 = *Ceranisus menes* (Walker, 1839) (Eulophidae))

4. *Eulophus Aphaca*, *fem.* (*Tranosoma*). Ent. Mag. i. 329. a. Antenna.

(*Eulophus aphaca* (Walker, 1839) = *Hyssopus nigritulus* (Zetterstedt, 1838) (Eulophidae))

Plate N (Plate 17 of the present work)

1. *Encyrtus Jugaeus*, (*Cercobelus*). Ent. Mag. v. 48. a. Antenna.

(*Encyrtus jugaeus* Walker, 1837 = *Cercobelus jugaeus* (Walker, 1837) (Encyrtidae))

2. *Cirrospilus Pacuvius*, (*Ceranisus*). Ann. Nat. Hist. i. a. Antenna.

(*Cirrospilus pacuvius* Walker, 1838 = *Ceranisus pacuvius* (Walker, 1838) (Eulophidae))

3. *Pirene vaicornis*, *mas*. Ent. Mag. i. 337. a. Antenna. b. Ditto of female.

(*Pirene varicornis* Haliday, 1833 = *Macroglenes varicornis* (Haliday, 1833) (Pteromalidae))

4. *Cerocephala formiciformis*. Ent. Mag. ii. 149. a. Antenna. b. Ditto of male. c. Head.

(*Cerocephala formiciformis* (Westwood, 1832) = *Theocolax formiciformis* Westwood, 1832 (Pteromalidae))

Plate O (Plate 18 of the present work)

1. *Ormyrus punctiger*, *fem.* Ent. Mag. i. 140. a. Antenna.

(*Ormyrus punctiger* Westwood, 1832 = *Ormyrus pomaceus* (Geoffroy, 1785) (Ormyridae))

2. *Calosoter vernalis*, *fem.* Ent. Mag. iv. 359. a. Antenna.

(*Calosoter vernalis* Walker, 1837 = *Calosota aestivalis* Curtis, 1836 (Eupelmidae))

3. *Macroneura maculipes*, *mas*. Ent. Mag. iv. 354. a. Antenna.

(*Macroneura maculipes* Walker, 1837 = *Eupelmus vesicularis* (Retzius, 1783) (Eupelmidae))

4. *Cea pulicaria*, *fem.* Ent. Mag. iv. 356. a. Antenna (the last three joints are restored conjecturally).

(*Cea pulicaria* Walker, 1837 = *Cea pulicaris* Walker, 1837 (Pteromalidae))

Plate P (Plate 19 of the present work)

1, 1a. *Eucharis Volusus*. Mon. Chal. ii. 9. b. Head in front. c. Antenna. d. Two last joints of antenna.

(*Eucharis volusus* Walker, 1839 = *Chalcura volusus* (Walker, 1839) (Eucharitidae))

2. *Thoracantha furcata*. Mon. Chal. ii. 65. a. Scutel covering the wings. b. Head in front. c. Antenna.

(*Thoracantha furcata* (Fabricius, 1804) = *Kapala furcata* (Fabricius, 1804) (Eucharitidae))

3. *Eucharis Iello*. Mon. Chal. ii. 12. a. Antenna. b. Hind tarsus.

(*Eucharis iello* Walker, 1839 = *Tricoryna iello* (Walker, 1839) (Eucharitidae))

4. *Eucharis Zalates*. Mon. Chal. ii. 13. a. Antenna of male.

b. Ditto of female. c. Hind tarsus of female.

(*Eucharis zalates* Walker, 1839 = *Tricoryna zalates* (Walker, 1839) (Eucharitidae))

5. *Merostenus Sadales*, *fem*. Mon. Chal. ii. 91. a. Antenna.

(*Merostenus sadales* Walker, 1839 = *Lelaps sadales* (Walker, 1839) (Pteromalidae))

PLATE 5: plate A from *The Entomologist* volume 1 (1841-1842)

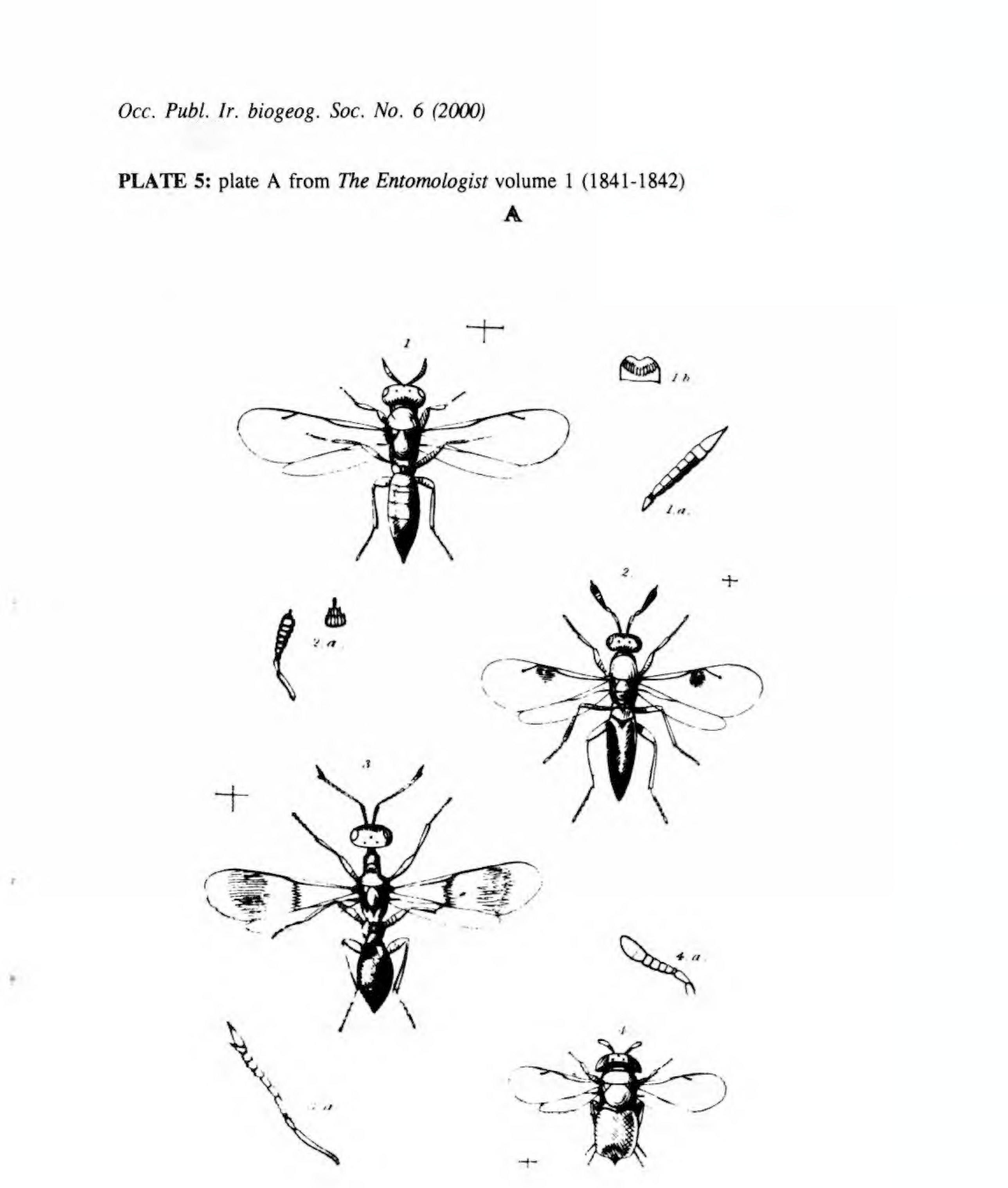


PLATE 6: plate B from *The Entomologist* volume 1 (1841-1842)

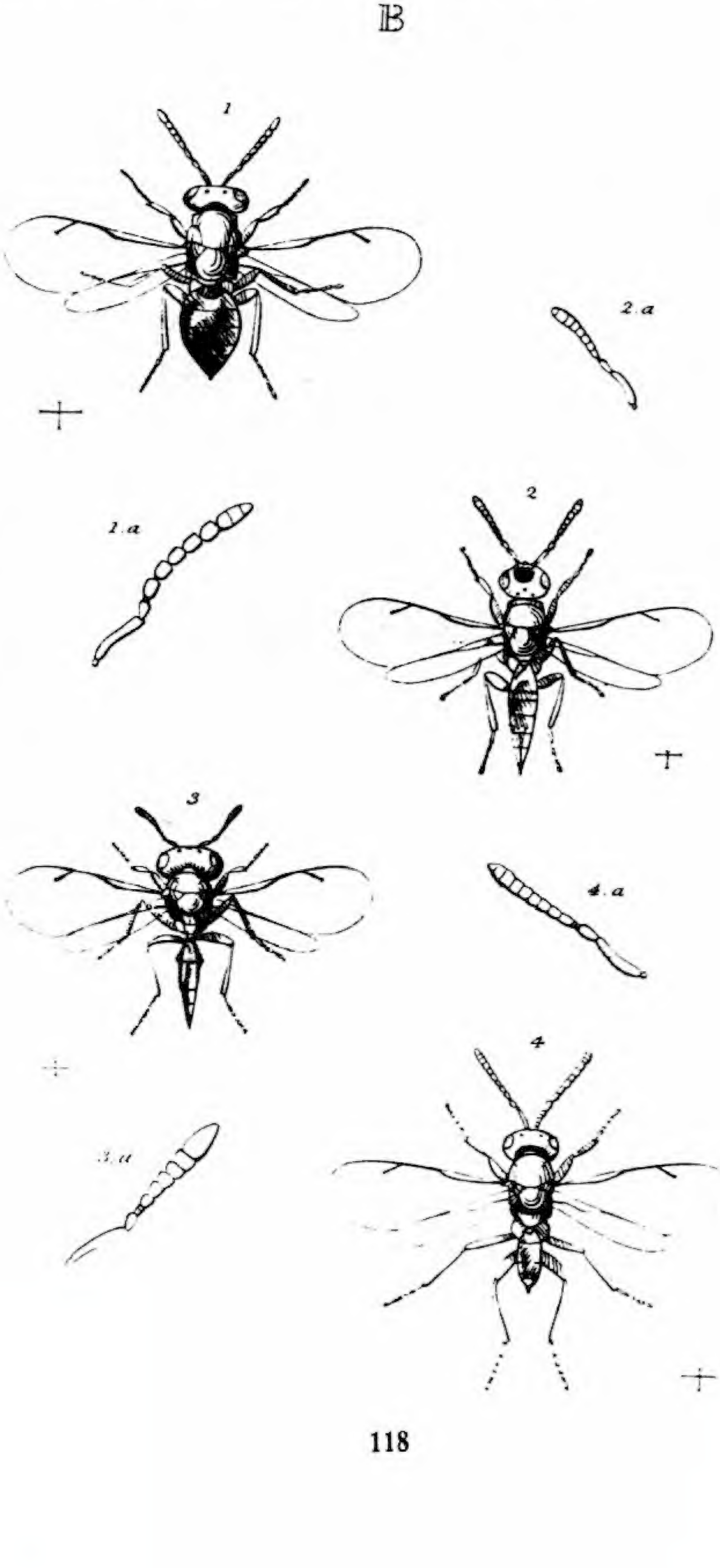


PLATE 7: plate C from *The Entomologist* volume 1 (1841-1842)

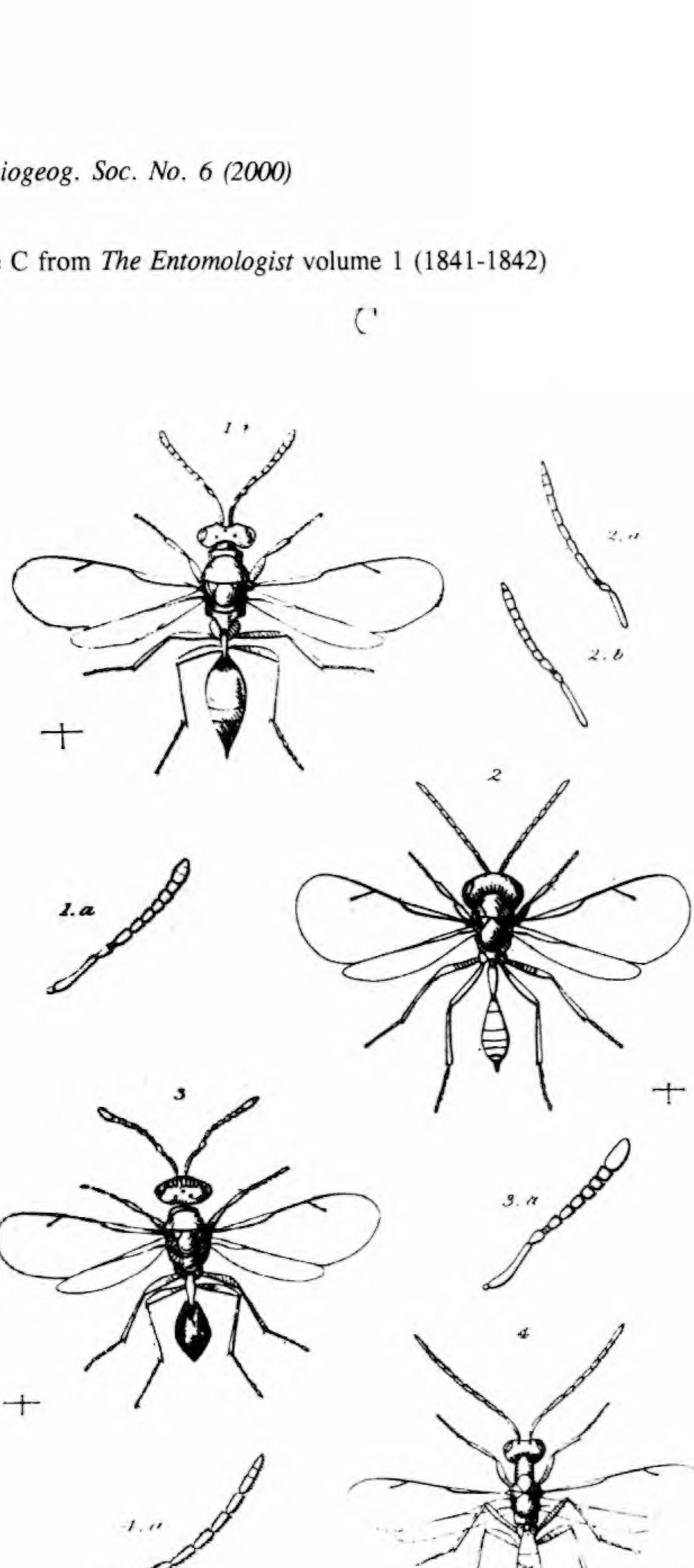


PLATE 8: plate D from *The Entomologist* volume 1 (1841-1842)

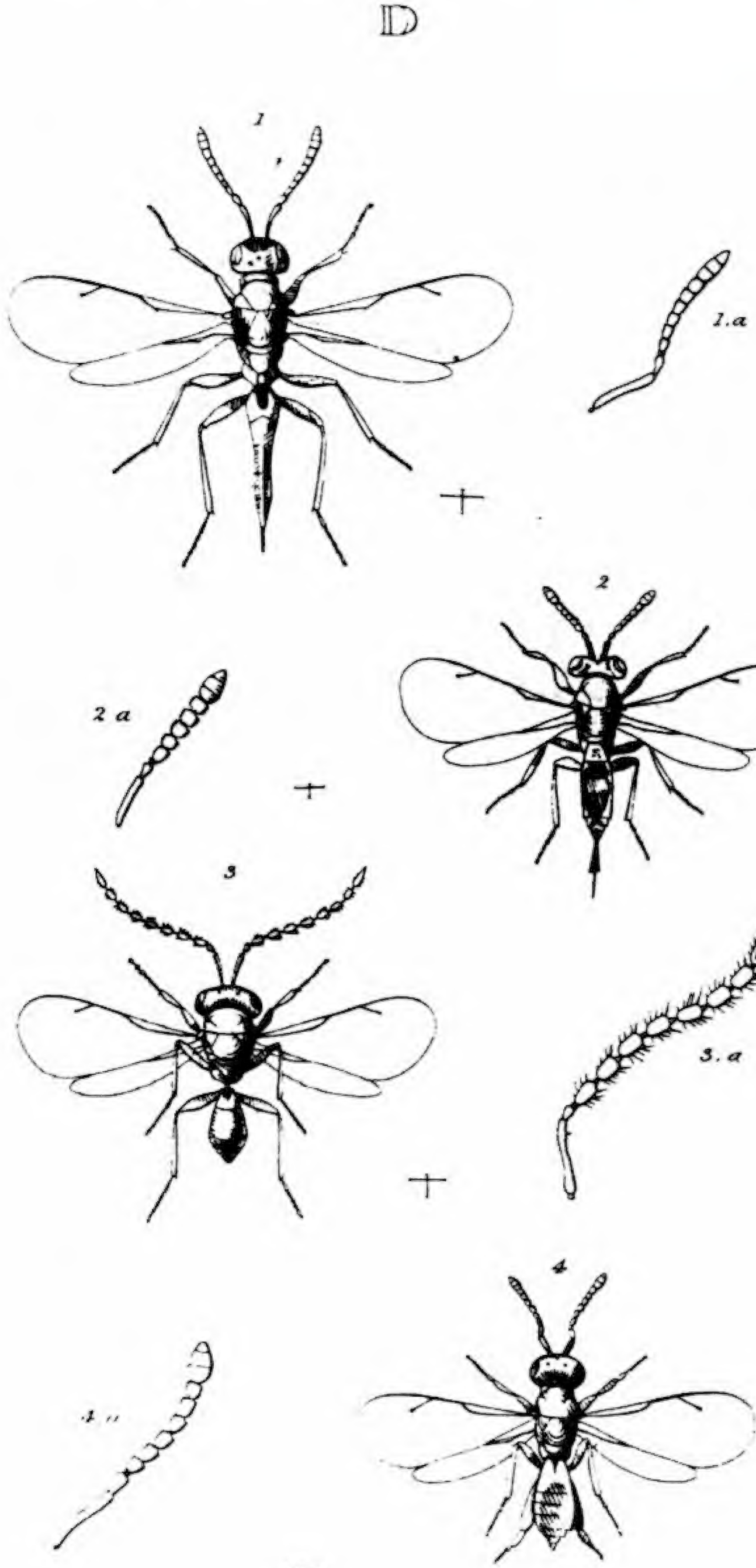


PLATE 9: plate E from *The Entomologist* volume 1 (1841-1842)

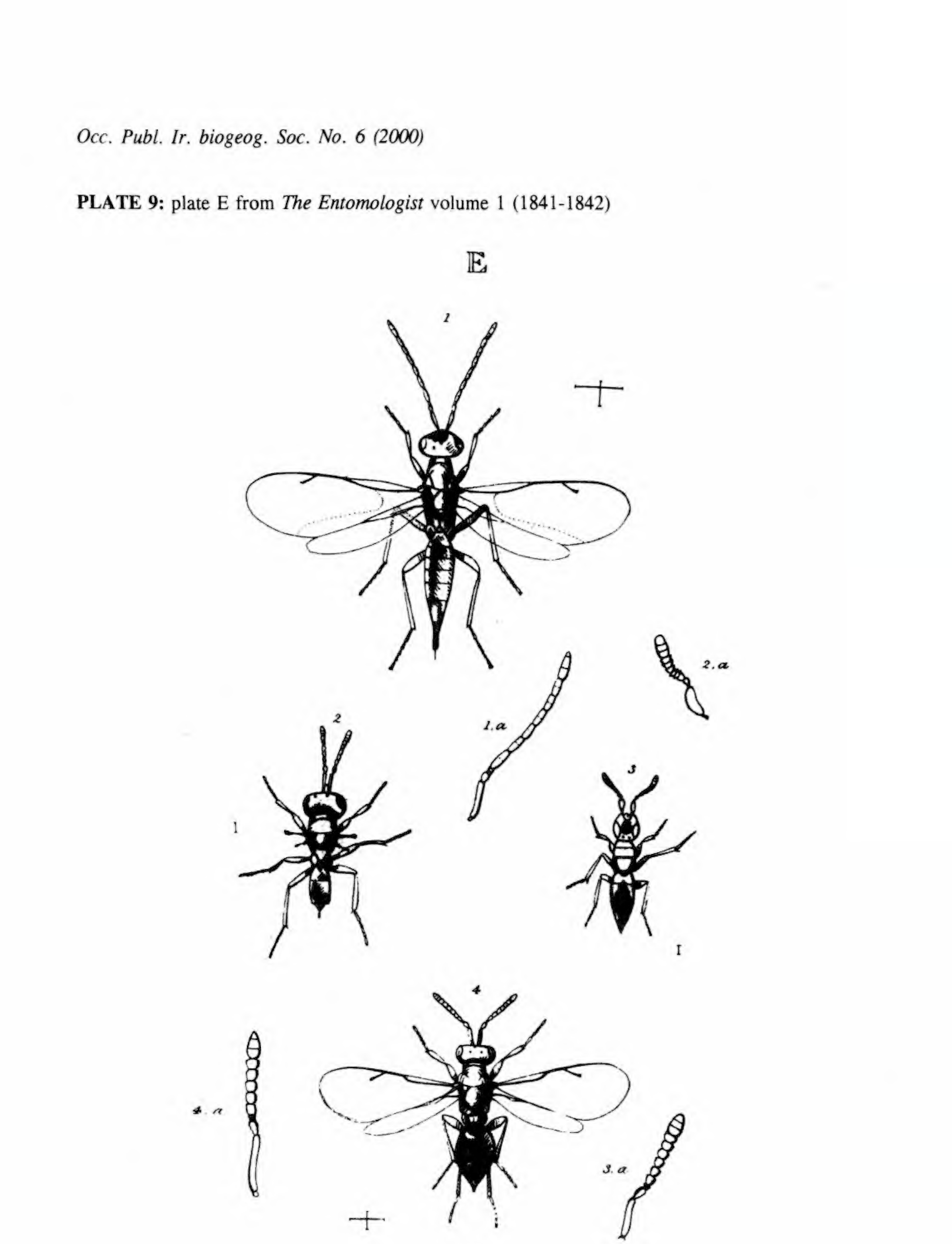


PLATE 10: plate F from *The Entomologist* volume 1 (1841-1842)

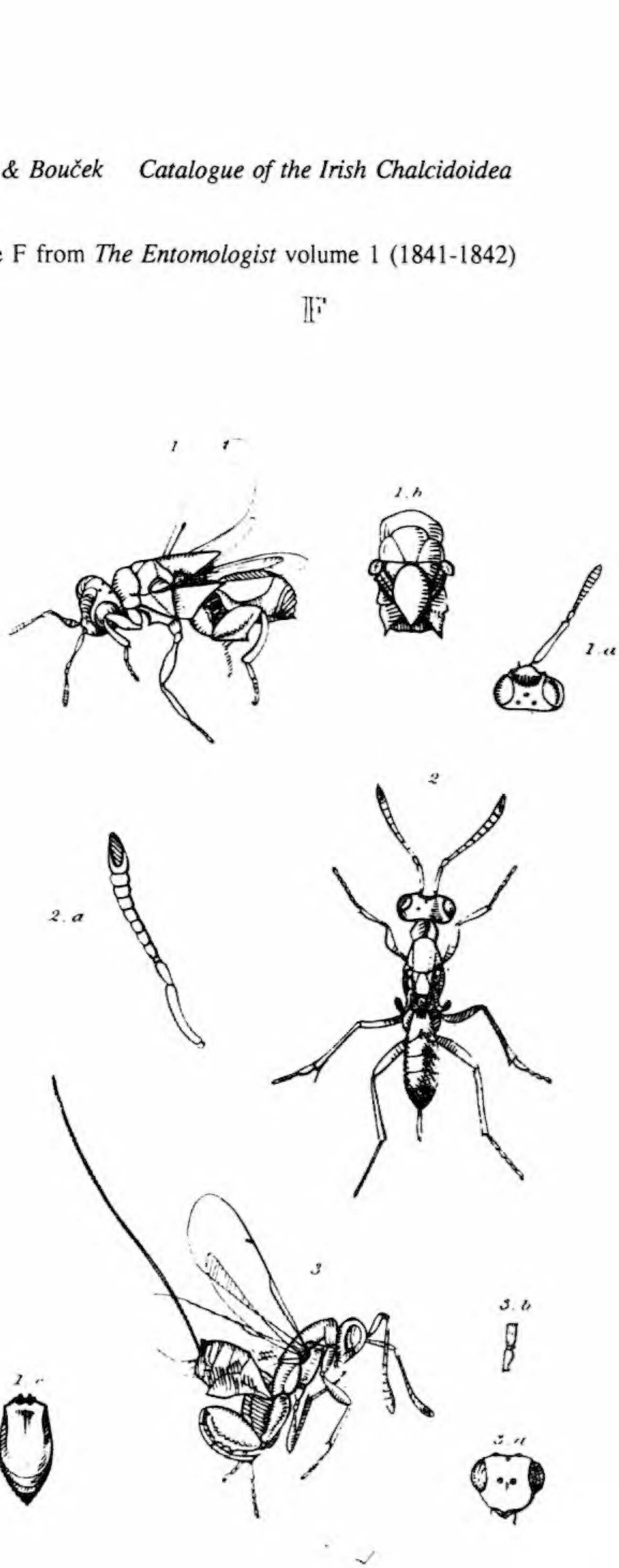


PLATE 11: plate G from *The Entomologist* volume 1 (1841-1842)

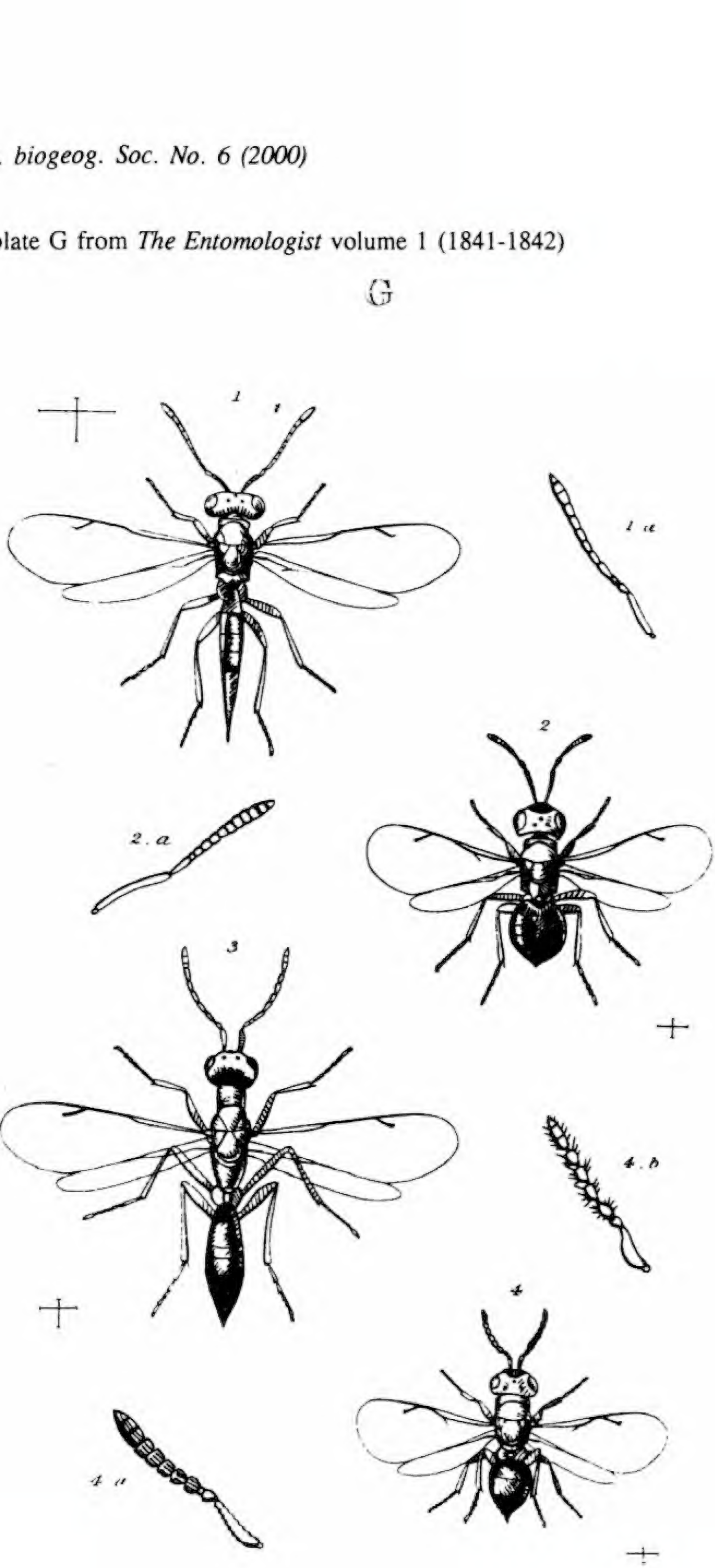


PLATE 12: plate H from *The Entomologist* volume 1 (1841-1842)

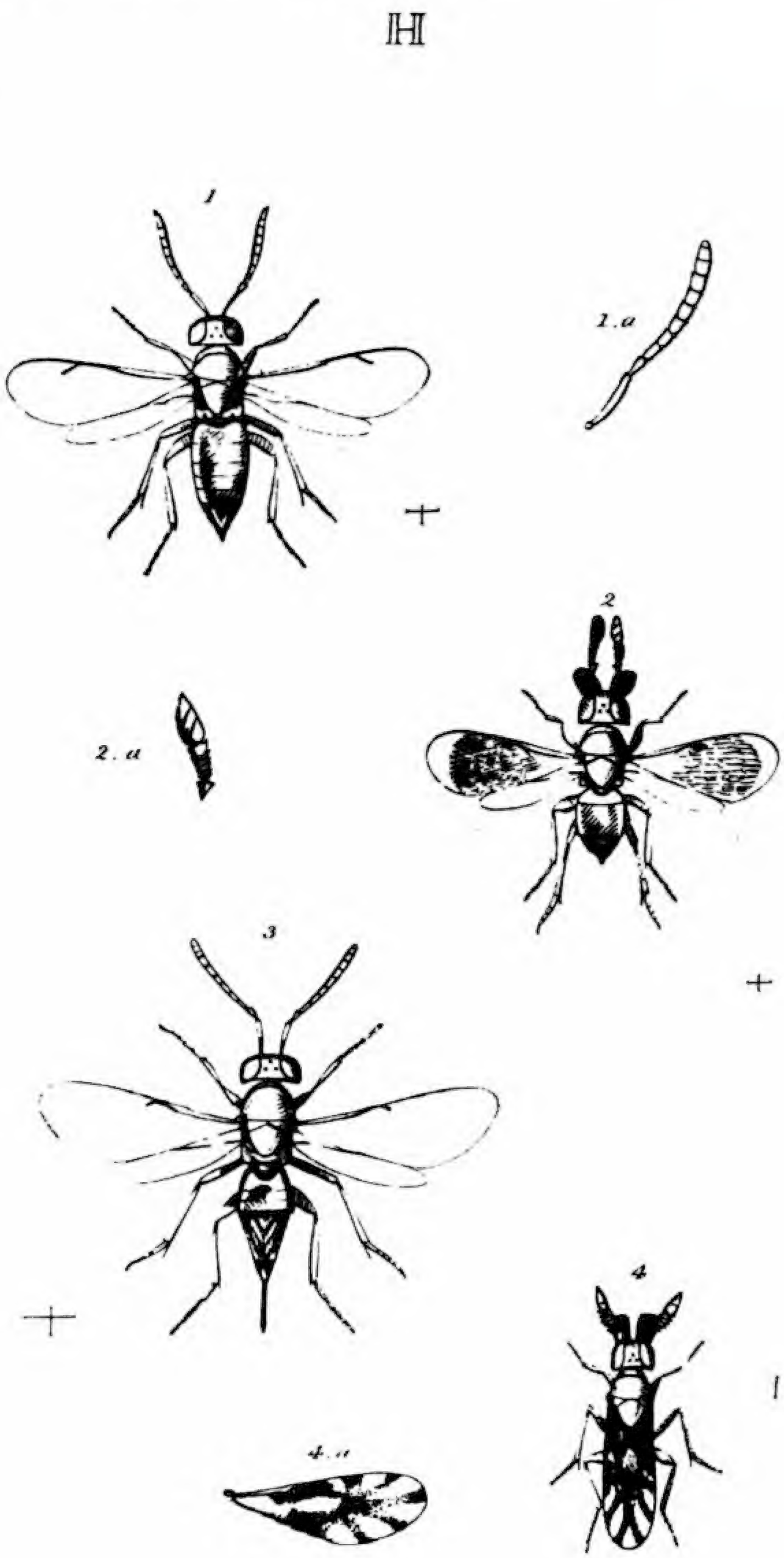


PLATE 13: plate J from *The Entomologist* volume 1 (1841-1842)

PLATE 14: plate K from *The Entomologist* volume 1 (1841-1842)

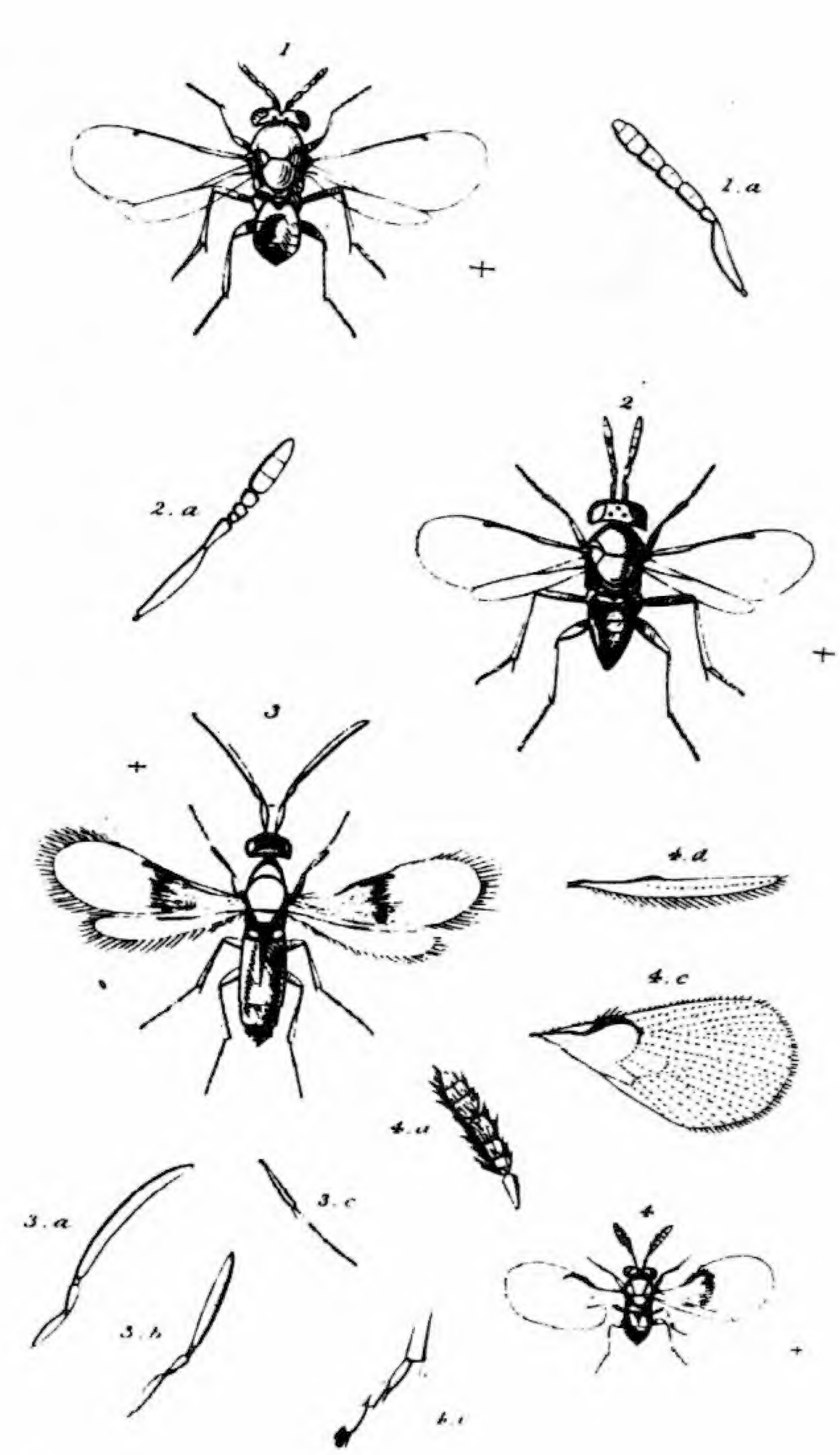


PLATE 15: plate L from *The Entomologist* volume 1 (1841-1842)

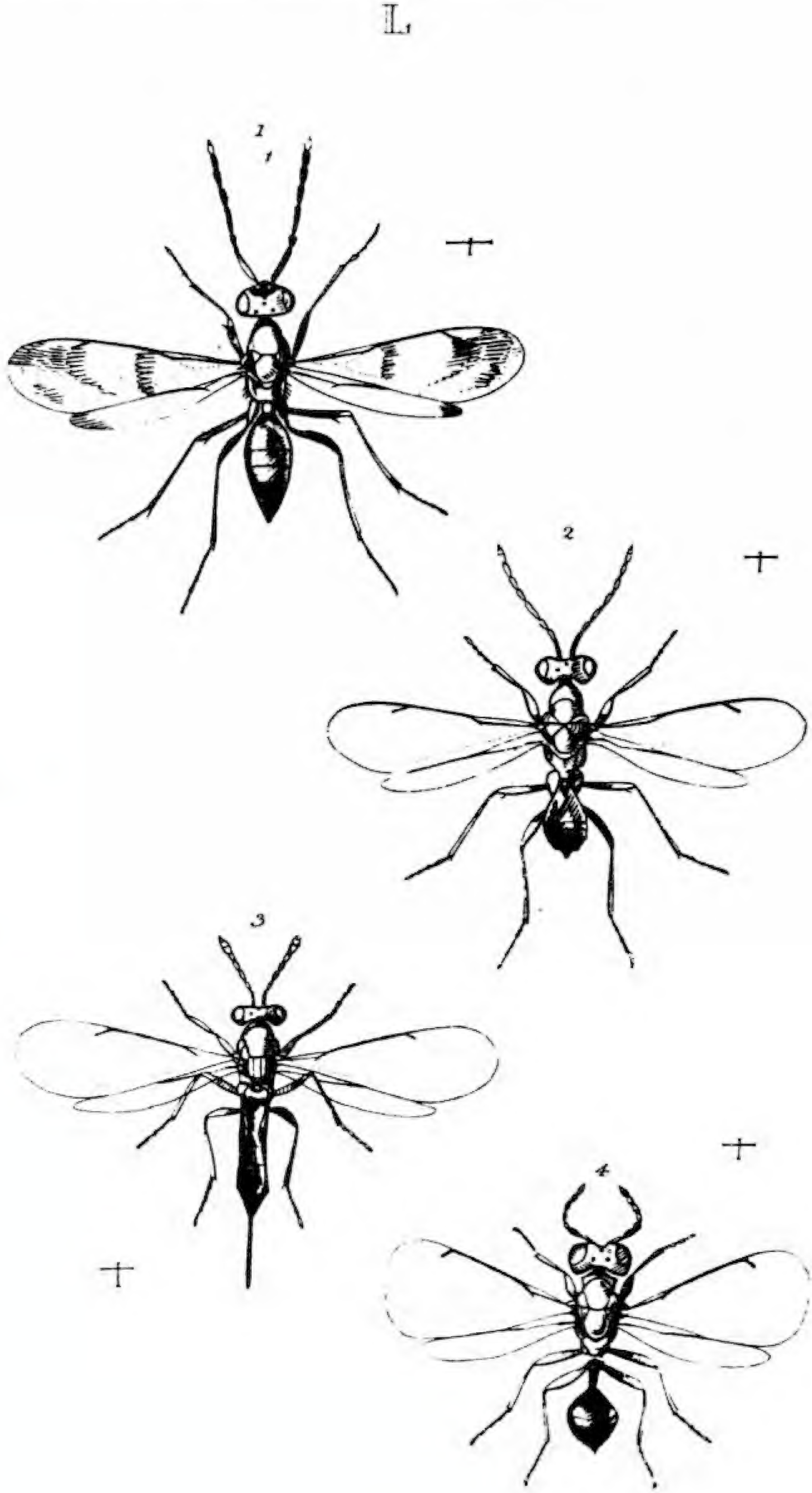


PLATE 16: plate M from *The Entomologist* volume 1 (1841-1842)

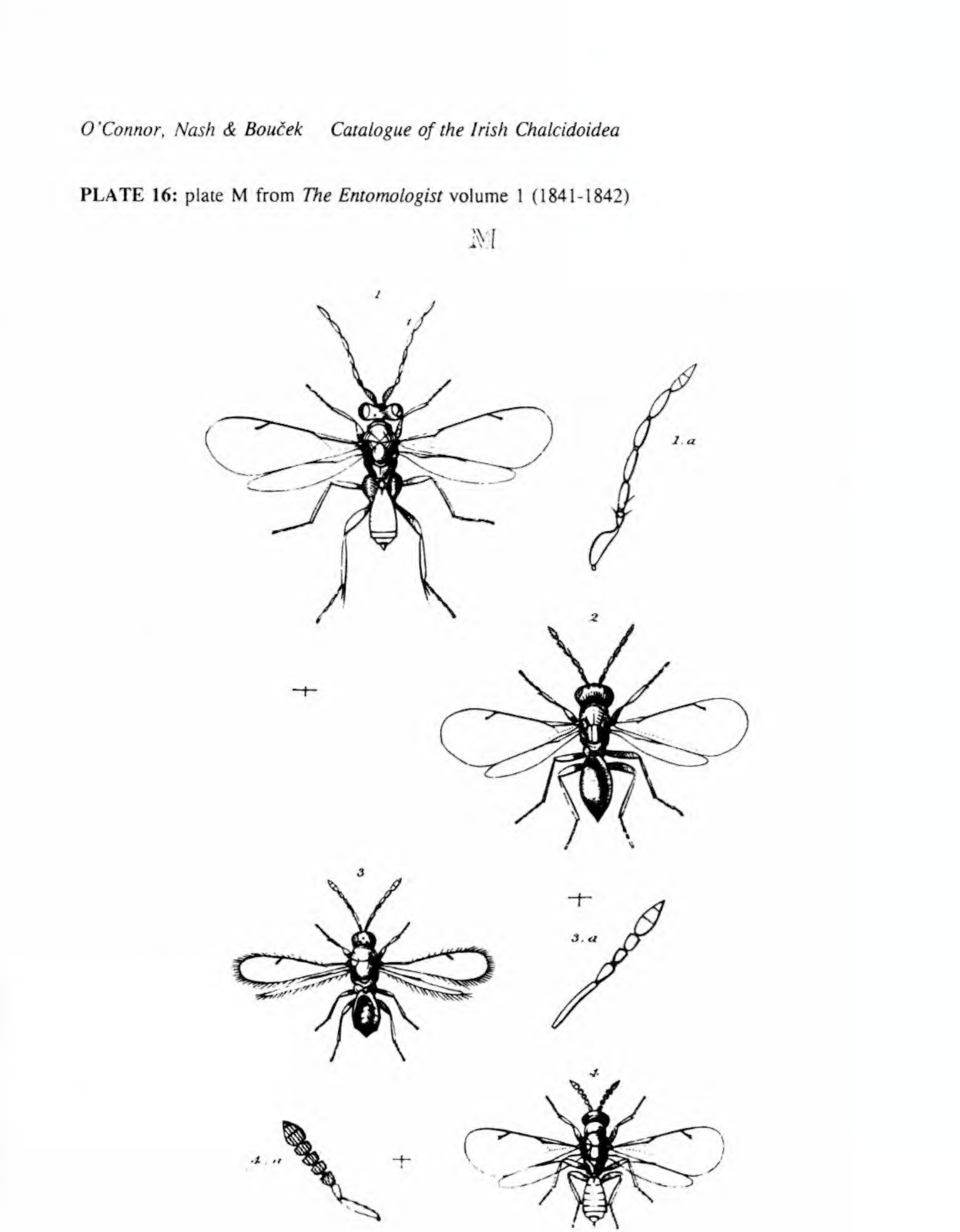


PLATE 17: plate N from *The Entomologist* volume 1 (1841-1842)

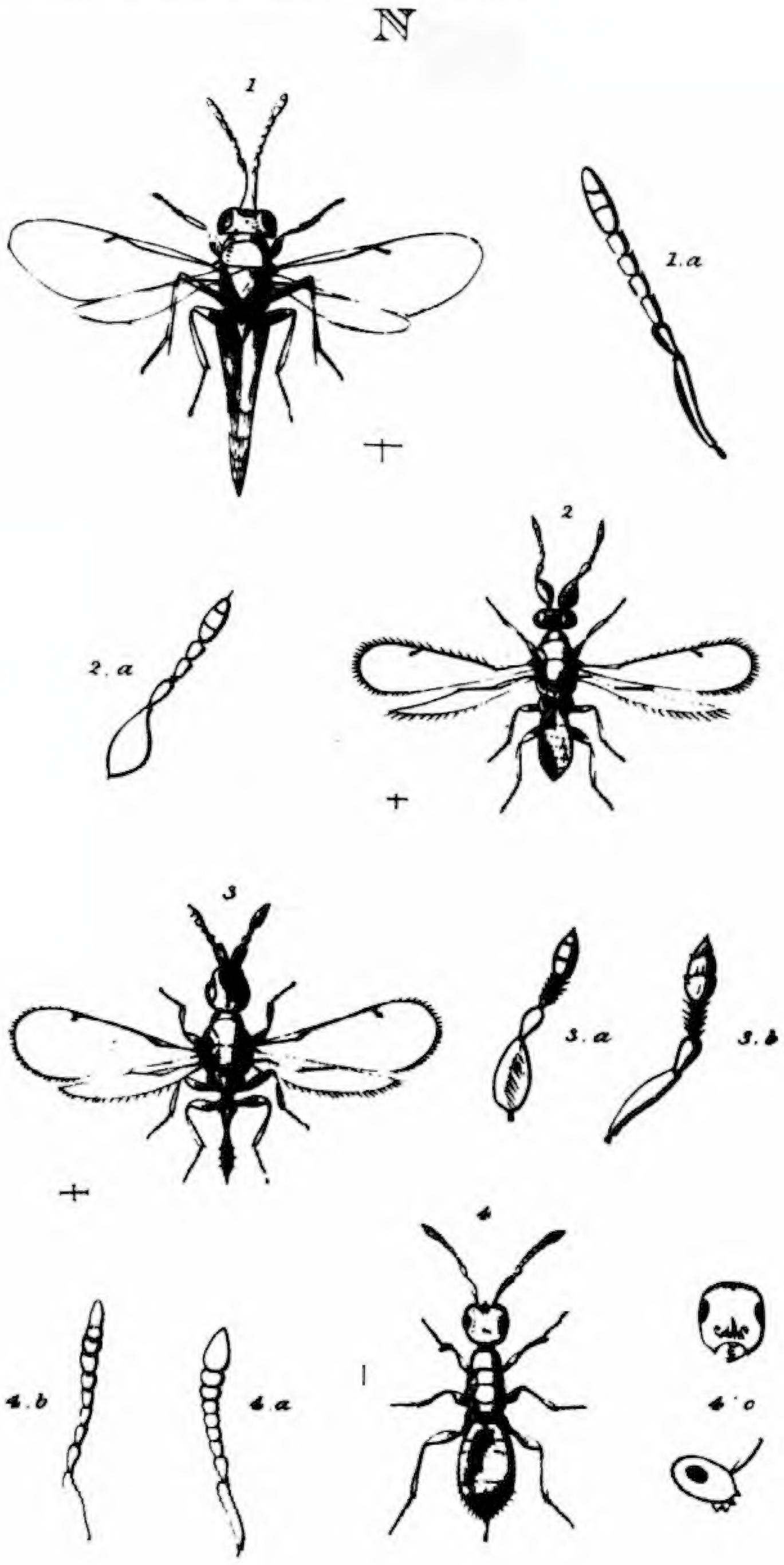


PLATE 18: plate O from *The Entomologist* volume 1 (1841-1842)

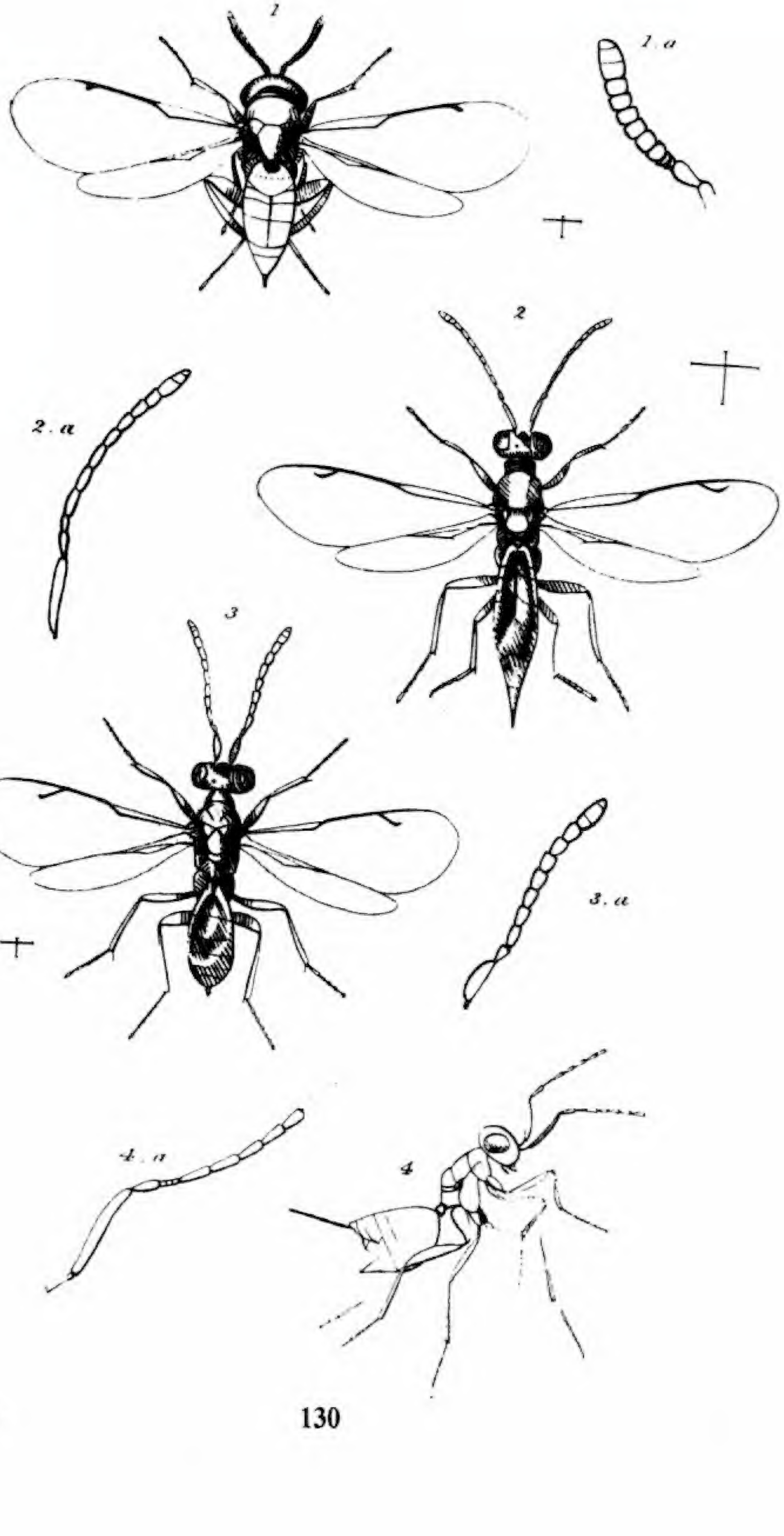
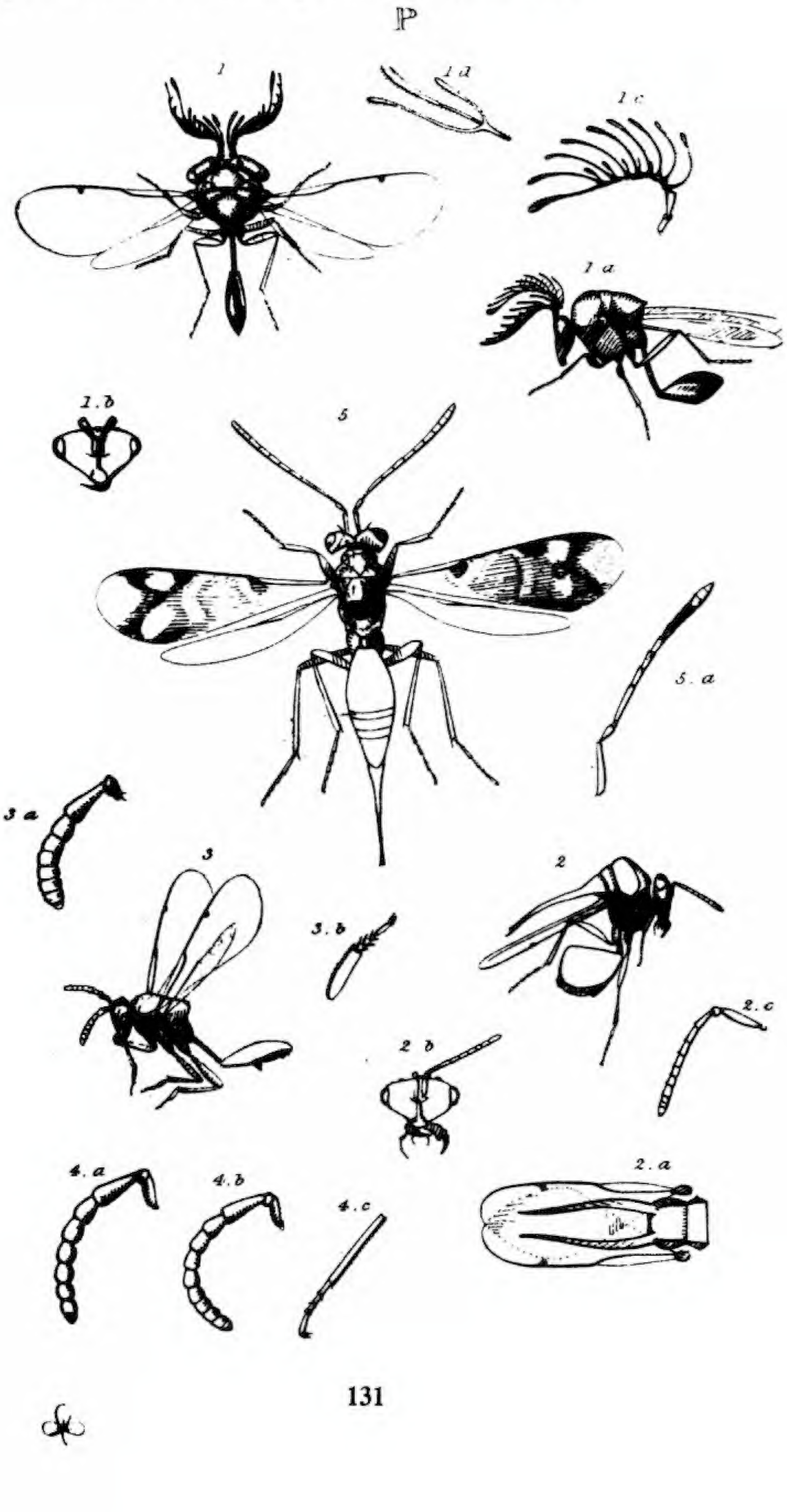


PLATE 19: figure P from *The Entomologist* volume 1 (1841-1842)



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